### UNITED STATES SECURITIES AND EXCHANGE COMMISSION

WASHINGTON, D.C. 20549

#### FORM 10-K

ANNUAL REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934 FOR THE FISCAL YEAR ENDED OCTOBER 31, 2016

Commission file number 1-4121

#### DEERE & COMPANY

(Exact name of registrant as specified in its charter)

Delaware (State of incorporation)

(IRS Employer Identification No.) (309) 765-8000

36-2382580

One John Deere Place, Moline, Illinois (Address of principal executive offices)

61265 (Zip Code)

(Telephone Number)

#### SECURITIES REGISTERED PURSUANT TO SECTION 12(b) OF THE ACT

Title of each class Common stock, \$1 par value 8-1/2% Debentures Due 2022 6.55% Debentures Due 2028

Name of each exchange on which registered

New York Stock Exchange New York Stock Exchange New York Stock Exchange

#### SECURITIES REGISTERED PURSUANT TO SECTION 12(g) OF THE ACT: NONE

Indicate by check mark if the registrant is a well-known seasoned issuer, as defined in Rule 405 of the Securities Act.

Indicate by check mark if the registrant is not required to file reports pursuant to Section 13 or Section 15(d) of the Act.

Indicate by check mark whether the registrant (1) has filed all reports required to be filed by Section 13 or 15(d) of the Securities Exchange Act of 1934 during the preceding 12 months (or for such shorter period that the registrant was required to file such reports), and (2) has been subject to such filing requirements for the past 90 days.

Indicate by check mark whether the registrant has submitted electronically and posted on its corporate Web site, if any, every Interactive Data File required to be submitted and posted pursuant to Rule 405 of Regulation S-T (§232.405 of this chapter) during the preceding 12 months (or for such shorter period that the registrant was required to submit and post such files).

Yes ⊠ No □

Indicate by check mark if disclosure of delinquent filers pursuant to Item 405 of Regulation S-K (§229.405 of this chapter) is not contained herein, and will not be contained, to the best of registrant's knowledge, in definitive proxy or information statements incorporated by reference in Part III of this Form 10-K or any amendment to this Form 10-K. 🗵

Indicate by check mark whether the registrant is a large accelerated filer, an accelerated filer, a non-accelerated filer, or a smaller reporting company. See the definitions of "large accelerated filer," "accelerated filer" and "smaller reporting company" in Rule 12b-2 of the Exchange Act. (Check one):

> Large accelerated filer ⊠ Non-accelerated filer □

Accelerated filer □ Smaller reporting company □

(Do not check if a smaller reporting company)

Indicate by check mark whether the registrant is a shell company (as defined in Rule 12b-2 of the Act).

The aggregate quoted market price of voting stock of registrant held by non-affiliates at April 30, 2016 was \$26,385,877,434. At November 30, 2016, 316,872,632 shares of common stock, \$1 par value, of the registrant were outstanding. Documents Incorporated by Reference. Portions of the proxy statement for the annual meeting of stockholders to be held on February 22, 2017 are incorporated by reference into Part III of this Form 10-K.

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#### ITEM 1. BUSINESS.

This Annual Report on Form 10-K contains forward-looking statements that are subject to risks and uncertainties. All statements other than statements of historical fact included in this Annual Report on Form 10-K are forward-looking statements. Forward-looking statements give our current expectations and projections relating to our financial condition, results of operations, plans, objectives, future performance and business. All forward-looking statements are subject to risks and uncertainties that may cause actual results to differ materially from those that we expected. Important factors that could cause actual results to differ materially from our expectations, or cautionary statements, and other important information about forward-looking statements are disclosed under Item 1A, "Risk Factors" and Item 7, "Management's Discussion and Analysis of Financial Condition and Results of Operations—Safe Harbor Statement" in this Annual Report on Form 10-K.

#### **Products**

Deere & Company (the Company) and its subsidiaries (collectively, John Deere) have operations that are categorized into three major business segments.

The agriculture and turf segment primarily manufactures and distributes a full line of agriculture and turf equipment and related service parts — including large, medium and utility tractors; loaders; combines, cotton pickers, cotton strippers, and sugarcane harvesters; related front-end harvesting equipment; sugarcane loaders and pull-behind scrapers; tillage, seeding and application equipment, including sprayers, nutrient management and soil preparation machinery; hay and forage equipment, including self-propelled forage harvesters and attachments, balers and mowers; turf and utility equipment, including riding lawn equipment and walk-behind mowers, golf course equipment, utility vehicles, and commercial mowing equipment, along with a broad line of associated implements; integrated agricultural management systems technology and solutions; and other outdoor power products.

The construction and forestry segment primarily manufactures and distributes a broad range of machines and service parts used in construction, earthmoving, material handling and timber harvesting — including backhoe loaders; crawler dozers and loaders; four-wheel-drive loaders; excavators; motor graders; articulated dump trucks; landscape loaders; skid-steer loaders; and log skidders, feller bunchers, log loaders, log forwarders, log harvesters and related attachments.

The products and services produced by the segments above are marketed primarily through independent retail dealer networks and major retail outlets.

The *financial services* segment primarily finances sales and leases by John Deere dealers of new and used agriculture and turf equipment and construction and forestry equipment. In addition, the financial services segment provides wholesale financing to dealers of the foregoing equipment, finances retail revolving charge accounts and offers extended equipment warranties.

John Deere's worldwide agriculture and turf operations and construction and forestry operations are sometimes collectively referred to as the "equipment operations." The financial services segment is sometimes referred to as the "financial services operations."

Additional information is presented in the discussion of business segment and geographic area results on page 23. The John Deere enterprise has manufactured agricultural machinery since 1837. The present Company was incorporated under the laws of Delaware in 1958.

The Company's internet address is <a href="http://www.JohnDeere.com">http://www.JohnDeere.com</a>. Through that address, the Company's Annual Report on Form 10-K, quarterly reports on Form 10-Q, current reports on Form 8-K and amendments to those reports are available free of charge as soon as reasonably practicable after they are filed with the United States Securities and Exchange Commission (Securities and Exchange Commission or Commission). The information contained on the Company's website is not included in, or incorporated by reference into, this annual report on Form 10-K.

#### **Market Conditions and Outlook**

The Company's equipment sales are projected to decrease 1 percent for fiscal year 2017 and decrease about 4 percent for the first quarter, compared with the same periods in 2016. Included in the forecast is a positive foreign currency translation effect of about 1 percent for the year and about 2 percent for the quarter. For fiscal year 2017, net income attributable to Deere & Company is anticipated to be about \$1.4 billion. In December 2016, the Company sold a portion of its interest in SiteOne Landscape Supply, Inc. (SiteOne) (see Note 30) resulting in a gain of approximately \$105 million pretax or \$66 million after-tax. This gain is not included in the fiscal year 2017 net income forecast above.

During the fourth quarter of 2016, the Company announced voluntary employee separation programs as part of its effort to reduce operating costs. The expense of these programs is recorded in the period in which employees accept their separation offer. Total pretax expenses related to the programs are estimated to be \$111 million, of which \$11 million was recorded in the fourth quarter of 2016, and \$100 million will be recorded primarily in the first quarter of 2017. Savings from the separation programs are expected to be approximately \$70 million in 2017.

Agriculture & Turf. The Company's worldwide sales of agriculture and turf equipment are forecast to decrease by about 1 percent for fiscal year 2017, including a positive currency translation effect of about 1 percent. Industry sales for agricultural equipment in the U.S. and Canada are forecast to be down 5 to 10 percent for 2017. The decline, which reflects the continuing impact of low commodity prices and weak farm incomes, is expected to be felt in the sale of both large and small models of equipment.

Full year 2017 industry sales in the EU28 member nations are forecast to decline about 5 percent, with the decline attributable to low commodity prices and farm incomes. South American industry sales of tractors and combines are projected to increase about 15 percent as a result of improving economic and political conditions in Brazil and Argentina. Asian sales are projected to be about the same to up slightly, benefiting from higher sales in India. Industry sales of turf and utility equipment in the U.S. and Canada are expected to be about the same for 2017, with company sales outpacing the industry.

Construction & Forestry. The Company's construction and forestry equipment sales are forecast to increase about 1 percent for 2017, including a positive currency translation effect of about 1 percent. The forecast reflects the impact of generally slow economic growth worldwide. In forestry, global industry sales are expected to be about the same as in 2016 with some moderation in the North American market.

Financial Services. Fiscal year 2017 net income attributable to Deere & Company for the financial services operations is expected to be approximately \$480 million. The outlook reflects lower losses on lease residual values, partially offset by less favorable financing spreads and an increased provision for credit losses.

#### 2016 Consolidated Results Compared with 2015

Worldwide net income attributable to Deere & Company in 2016 was \$1,524 million, or \$4.81 per share diluted (\$4.83 basic), compared with \$1,940 million, or \$5.77 per share diluted (\$5.81 basic), in 2015. Worldwide net sales and revenues decreased 8 percent to \$26,644 million in 2016, compared with \$28,863 million in 2015. Net sales of the worldwide equipment operations declined 9 percent in 2016 to \$23,387 million from \$25,775 million last year. Sales included price realization of 2 percent and an unfavorable currency translation effect of 2 percent. Equipment net sales in the United States and Canada decreased 13 percent for 2016. Outside the U.S. and Canada, net sales decreased 3 percent for the year, with an unfavorable currency translation effect of 4 percent for 2016.

Worldwide equipment operations had an operating profit of \$1,880 million in 2016, compared with \$2,177 million in 2015. The operating profit decline was primarily on account of reduced shipment volumes, the unfavorable effects of foreign currency exchange and a less favorable product mix, partially offset by price realization, lower production costs, lower selling, administrative and general expenses and a gain on the sale of a partial interest in the unconsolidated affiliate SiteOne.

Net income of the Company's equipment operations was \$1,058 million for 2016, compared with \$1,308 million in 2015. In addition to the operating factors mentioned above, a higher effective tax rate in 2016 reduced net income.

Net income of the financial services operations attributable to Deere & Company in 2016 decreased to \$468 million, compared with \$633 million in 2015. The decline was primarily due to less favorable financing spreads, higher losses on lease residual values, and a higher provision for credit losses. Prior year results benefited from a gain on the sale of the crop insurance business

The cost of sales to net sales ratio for 2016 was 78.0 percent, compared with 78.1 percent last year. The decrease was due primarily to price realization and lower production costs, largely offset by the unfavorable effects of foreign currency exchange and the impact of a less favorable product mix.

Additional information on 2016 results is presented on pages 22-24.

#### **EQUIPMENT OPERATIONS**

#### **Agriculture and Turf**

The John Deere agriculture and turf segment manufactures and distributes a full line of agriculture and turf equipment and related service parts. The segment consolidates all markets into four geographical customer focus areas to facilitate deep customer understanding and deliver world-class customer service. The segment's equipment operations are consolidated into five product platforms — crop harvesting (combines, cotton pickers, cotton strippers, and sugarcane harvesters, related front-end harvesting equipment, sugarcane loaders and pull-behind scrapers); turf and utility (utility vehicles, riding lawn equipment, walk-behind mowers, commercial mowing equipment, golf course equipment, implements for mowing, tilling, snow and debris handling, aerating and many other residential, commercial, golf and sports turf care applications and other outdoor power products); hay and forage (self-propelled forage harvesters and attachments, balers and mowers); crop care (tillage, seeding and application equipment, including sprayers, nutrient management and soil preparation machinery); and tractors (loaders and large, medium and utility tractors and related attachments). John Deere also purchases certain products from other manufacturers for resale.

The segment also provides integrated agricultural business and equipment management systems. John Deere has developed a comprehensive agricultural management systems approach using advanced communications, data collection and global satellite positioning technologies to enable farmers to better control input costs and yields, improve soil conservation, minimize chemical use, and to gather information. John Deere's advanced telematics systems remotely connect agricultural equipment owners, business managers and dealers to agricultural equipment in the field, providing real-time alerts and information about equipment location, utilization, performance and maintenance to improve productivity and efficiency.

In addition to the John Deere brand, the agriculture and turf segment purchases and sells a variety of equipment attachments under the Frontier, Kemper and Green Systems brand names, and manufactures and sells walk-behind mowers and scarifiers in select European countries under the SABO brand name. John Deere manufactures its agriculture and turf equipment for sale primarily through independent retail dealer networks, and also builds turf products for sale by mass retailers, including The Home Depot and Lowe's.

Sales of agricultural equipment are affected by total farm cash receipts, which reflect levels of farm commodity prices, acreage planted, crop yields and government policies, including the amount and timing of government payments. Sales are also influenced by general economic conditions, farm land prices, farmers' debt levels and access to financing, interest and exchange rates, agricultural trends, including the production of and demand for renewable fuels, labor availability and costs, energy costs, tax policies and other input costs associated with farming. Other important factors affecting new agricultural equipment sales are the value and level of used equipment, including tractors, harvesting equipment, self-propelled sprayers, hay and forage equipment and seeding equipment. Weather and climatic conditions can also affect buying decisions of agricultural equipment purchasers.

Innovations in machinery and technology also influence agricultural equipment purchasing. For example, larger, more productive equipment is well accepted where farmers are striving for more efficiency in their operations. Large, cost-efficient, highly-mechanized agricultural operations account for an important share of worldwide farm output. The large-size agricultural equipment used on such farms has been particularly important to John Deere. A large proportion of the equipment operations' total agricultural equipment sales in the U.S. and Canada, and a significant proportion of sales in many countries outside the U.S. and Canada, comprises tractors over 100 horsepower, self-propelled combines, self-propelled cotton pickers, self-propelled sprayers and seeding equipment. However, John Deere's sales of small tractors below 100 horsepower are increasing, and John Deere offers a number of harvesting solutions to support development of the mechanized harvesting of grain, oilseeds, cotton, sugar and biomass.

Retail sales of lawn and garden tractors, compact utility tractors, residential and commercial mowers, utility vehicles, and golf and turf equipment are influenced by weather conditions, consumer spending patterns and general economic conditions.

Seasonal patterns in retail demand for agricultural equipment result in substantial variations in the volume and mix of products sold to retail customers during the year. Seasonal demand must be estimated in advance, and equipment must be manufactured in anticipation of such demand in order to achieve efficient utilization of manpower and facilities throughout the year. For certain equipment, John Deere offers early order discounts to retail customers. Production schedules are based, in part, on these early order programs. The segment incurs substantial seasonal variation in cash flows to finance production and inventory of agricultural equipment. The segment also incurs costs to finance sales to dealers in advance of seasonal demand. New combine and cotton harvesting equipment has been sold under early order programs with waivers of retail finance charges available to customers who take delivery of machines during off-season periods. In Australia, Canada and the U.S., there are typically several used equipment trade-in transactions as part of most new agricultural equipment sales. To provide support to its dealers for these used equipment trade-ins, John Deere provides dealers in these countries with a pool of funds, awarded to dealers as a percentage of the dealer cost for eligible new equipment sales. Dealers can use these funds to defray the costs of carrying or marketing used equipment inventory or to provide financing incentives to customers purchasing the used equipment.

Retail demand for turf and utility equipment is normally higher in the second and third fiscal quarters. John Deere has pursued a strategy of building and shipping such equipment as close to retail demand as possible. Consequently, to increase asset turnover and reduce the average level of field inventories through the year, production and shipment schedules of these product lines are normally proportionately higher in the second and third fiscal quarters of each year, corresponding closely to the seasonal pattern of retail sales.

#### **Construction and Forestry**

John Deere's construction and forestry equipment includes a broad range of backhoe loaders, crawler dozers and loaders, four-wheel-drive loaders, excavators, motor graders, articulated dump trucks, landscape loaders, skid-steer loaders, log skidders, log feller bunchers, log loaders, log forwarders, log harvesters and a variety of attachments. John Deere provides a broad line of construction equipment and the most complete line of forestry machines and attachments available in the world. The construction and forestry machines are distributed under the John Deere brand name, and forestry attachments are distributed under the John Deere and Waratah brand names. In addition to the equipment manufactured by the construction and forestry segment, John Deere purchases certain products from other manufacturers for resale. The segment also provides comprehensive fleet management telematics solutions designed to improve customer productivity and efficiency through access to fleet location, utilization and maintenance information.

The prevailing levels of residential, commercial and public construction and the condition of the forestry products industry influence retail sales of John Deere construction, earthmoving, material handling and forestry equipment. General economic conditions, the level of interest rates, the availability of credit and certain commodity prices such as those applicable to pulp, paper and saw logs also influence sales.

John Deere licenses Bell Equipment Limited (Bell) to manufacture and sell certain John Deere-designed construction equipment in specified territories of Africa. Bell is also the distributor of certain John Deere-manufactured construction equipment under the Bell brand and forestry equipment under the John Deere brand in certain territories of Africa. Bell and John Deere terminated the articulated dump truck manufacturing and license agreements in 2016

John Deere and Hitachi Construction Machinery Co. (Hitachi) have a joint venture for the manufacture of hydraulic excavators and tracked forestry equipment and loaders in the U.S. and Canada and a joint venture for the manufacture of excavators in Brazil. John Deere distributes Hitachi brands of construction and mining equipment in North, Central and South America. John Deere also has supply agreements with Hitachi under which a range of construction, earthmoving, material handling and forestry equipment manufactured by John Deere in the U.S., Finland and New Zealand is distributed by Hitachi in certain Asian markets.

The segment has a number of initiatives in the rent-to-rent, or short-term rental, market for construction, earthmoving and material handling equipment. These include specially designed rental programs for John Deere dealers and expanded cooperation with major, national equipment rental companies.

John Deere also owns Nortrax, Inc. that in turn owns Nortrax Canada Inc. that in turn owns Nortrax Quebec Inc. (collectively called Nortrax). Nortrax is an authorized John Deere dealer for construction, earthmoving, material handling and forestry equipment in a variety of markets in the U.S. and Canada. John Deere also owns retail forestry sales operations in Australia, Brazil, Finland, Ireland, New Zealand, Norway, Sweden and the United Kingdom.

#### Competition

The equipment operations sell products and services into a variety of highly competitive global and regional markets. The principal competitive factors in all markets include product performance, innovation and quality, distribution, customer service and price. In North America and many other parts of the world, John Deere's brand recognition is a competitive factor.

The competitive environment for the agriculture and turf segment includes some global competitors, including AGCO Corporation, CLAAS KGaA mbH, CNH Global N.V., Kubota Tractor Corporation and The Toro Company and many regional and local competitors. These competitors have varying numbers of product lines competing with the segment's products and each has varying degrees of regional focus. An important part of the competition within the agricultural equipment industry during the past decade has come from a variety of short-line and specialty manufacturers, as well as indigenous regional competitors, with differing manufacturing and marketing methods. Because of industry conditions, including the merger of certain large integrated competitors and the emergence and expanding global capability of many competitors, particularly in emerging and high potential markets such as Brazil, China and India where John Deere seeks to increase market share, the agricultural equipment business continues to undergo significant change and is becoming even more competitive. The segment's turf equipment is sold primarily in the highly competitive North American and Western European markets.

The construction and forestry segment operates in highly competitive North American and global markets, including Brazil, China and Russia. Global competitors of the construction and forestry segment include Caterpillar Inc., Komatsu Ltd., Volvo Construction Equipment (part of Volvo Group AB), CNH Global N.V., Tigercat Industries Inc. and Ponsse Plc. The segment manufactures over 90 percent of the types of construction equipment used in the U.S. and Canada, including construction, earthmoving and material handling equipment.

#### **Engineering and Research**

John Deere invests heavily in engineering and research to improve the quality and performance of its products, to develop new products and to comply with government regulations. Such expenditures were \$1,389 million, or 5.9 percent of net sales, in 2016, \$1,425 million, or 5.5 percent of net sales, in 2015 and \$1,452 million, or 4.4 percent of net sales. in 2014.

#### Manufacturing

Manufacturing Plants. In the U.S. and Canada, the equipment operations own and operate 21 factory locations and lease and operate another two locations, which contain approximately 28.7 million square feet of floor space. Of these 23 factories, 13 are devoted primarily to agriculture and turf equipment, four to construction and forestry equipment, one to engines, two to engine and component remanufacturing, two to hydraulic and power train components, and one to electronic components. Outside the U.S. and Canada, the equipment operations own or lease and operate: agriculture and turf equipment factories in Brazil, China, France, Germany, India, Israel, Mexico, the Netherlands, Russia and Spain; construction equipment factories in Brazil and China; engine, engine/power train, or electronic component factories in Argentina, China, France, India and Mexico; and forestry equipment factories in Finland and New Zealand. These factories and manufacturing operations outside the U.S. and Canada contain approximately 20 million square feet of floor space. The engine factories referred to above manufacture non-road, heavy duty diesel engines.

The equipment operations also have financial interests in other manufacturing organizations, which include agricultural equipment manufacturers in the U.S., Bell in South Africa, the Hitachi joint venture that builds hydraulic excavators and track log loaders in the U.S. and Canada and the Hitachi joint venture that builds hydraulic excavators in Brazil, and ventures that manufacture transaxles and transmissions used in certain agriculture and turf segment products.

John Deere's facilities are well maintained, in good operating condition and suitable for their present purposes. These facilities, together with both short-term and long-term planned capital expenditures, are expected to meet John Deere's manufacturing needs in the foreseeable future.

Existing capacity is sufficient to satisfy John Deere's current expectations for retail market demand. The equipment operations' manufacturing strategy involves the implementation of appropriate levels of technology and automation to allow manufacturing processes to remain profitable at varying production levels. Operations are also designed to be flexible enough to accommodate the product design changes required to meet market conditions and changing customer requirements. Common manufacturing facilities and techniques are employed in the production of components for agriculture and turf equipment and construction and forestry equipment.

In order to utilize manufacturing facilities and technology more effectively, the equipment operations pursue continuous improvements in manufacturing processes. These include steps to streamline manufacturing processes and enhance responsiveness to customers. John Deere has implemented flexible assembly lines that can accommodate a wider product mix and deliver products in line with dealer and customer demand. Additionally, considerable effort is being directed to manufacturing cost reduction through process improvement and improvements in product design, advanced manufacturing technology, supply management and logistics, and environment, health, and safety management systems as well as compensation incentives related to productivity and organizational structure. In past years, John Deere has experienced volatility in the price of many raw materials. John Deere has responded to cost pressures by implementing the cost-reduction measures described above and by increasing prices. Significant cost increases, if they occur, could have an adverse effect on the Company's operating results. The equipment operations also pursue external sales of selected parts and components that can be manufactured and supplied to third parties on a competitive basis, including engines, power train components and electronic components.

Capital Expenditures. The equipment operations' capital expenditures totaled \$665 million in 2016, compared with \$649 million in 2015 and \$1,001 million in 2014. Provisions for depreciation applicable to these operations' property and equipment during these years were \$695 million, \$687 million and \$690 million, respectively. Capital expenditures for the equipment operations in 2017 are currently estimated to be approximately \$600 million. The 2017 expenditures will relate primarily to the modernization and restructuring of key manufacturing facilities, U.S. Tier 4 emission requirements and the development of new products. Future levels of capital expenditures will depend on business conditions.

#### **Patents and Trademarks**

John Deere owns a significant number of patents, trade secrets, licenses and trademarks related to John Deere products and services, and expects the number to grow as John Deere continues to pursue technological innovations. John Deere's policy is to further its competitive position by filing patent applications in the U.S. and internationally to protect technology and improvements considered important to the business. John Deere believes that, in the aggregate, the rights under these patents and licenses are generally important to its operations and competitive position, but does not regard any of its businesses as being dependent upon any single patent or group of patents. However, certain John Deere trademarks, which contribute to John Deere's identity and the recognition of its products and services, including but not limited to the "John Deere" mark, the leaping deer logo, the "Nothing Runs Like a Deere" slogan, the prefix "JD" associated with many products and green and yellow equipment colors, are an integral part of John Deere's

business, and their loss could have a material adverse effect on the Company. For additional information see Risk Factor—The potential loss of John Deere intellectual property through trade secret theft, infringement of patents, trademark counterfeiting, or other loss of rights to exclusive use of John Deere intellectual property may have a material adverse effect on the Company. Our products may infringe the intellectual property rights of others.

#### Marketing

In the U.S. and Canada, the equipment operations distribute equipment and service parts through the following facilities: two agriculture and turf equipment sales and administration offices located in Olathe, Kansas and Cary, North Carolina and one sales branch located in Grimsby, Ontario; and one construction, earthmoving, material handling and forestry equipment sales and administration office located in Moline, Illinois. In addition, the equipment operations operate a centralized parts distribution warehouse in coordination with nine regional parts depots and distribution centers in the U.S. and Canada.

Through these U.S. and Canadian facilities, John Deere markets products to approximately 2,365 dealer locations, most of which are independently owned and operated. Of these, approximately 1,522 sell agricultural equipment, while approximately 424 sell construction, earthmoving, material handling and/or forestry equipment. Nortrax owns some of the 424 dealer locations. Turf equipment is sold at most John Deere agricultural equipment locations, a few construction, earthmoving, material handling and forestry equipment locations and about 419 turf-only locations, many of which also sell dissimilar lines of non-John Deere products. In addition, certain lawn and garden product lines are sold through The Home Depot and Lowe's.

Outside the U.S. and Canada, John Deere agriculture and turf equipment is sold to distributors and dealers for resale in over 100 countries. Sales and administrative offices are located in Argentina, Australia, Brazil, China, France, Germany, India, Italy, Mexico, the Netherlands, Poland, Russia, Singapore, South Africa, Spain, Sweden, Switzerland, Thailand, Turkey, Ukraine and the United Kingdom and administrative offices located in Ghana and Kenya. Associated companies doing business in China also sell agricultural equipment. Turf equipment sales outside the U.S. and Canada occur primarily in Europe and Australia. Construction, earthmoving, material handling and forestry equipment is sold to distributors and dealers primarily by sales offices located in Australia, Brazil, China, Finland, New Zealand, Miami, Russia and Singapore. Some of these dealers are independently owned while John Deere owns others. The equipment operations operate centralized parts distribution warehouses in Brazil, Germany, India and Russia in coordination with regional parts depots and distribution centers in Argentina. Australia. China, Mexico, South Africa, Sweden and the United Kingdom.

John Deere markets engines, power train and electronic components worldwide through select sales branches or directly to regional and global original equipment manufacturers and independently owned engine distributors.

#### **Raw Materials**

John Deere purchases raw materials and some manufactured components and replacement parts for its equipment, engines and other products from leading suppliers both domestically and internationally. These materials and components include a variety of steel products, steel and iron castings, forgings, plastics, electronics and ready-to-assemble components made to certain specifications. John Deere also purchases various goods and services used in production, logistics, offices and research and development processes. John Deere maintains strategic sourcing models to meet its production needs and build upon long-term supplier relationships. John Deere uses a variety of agreements with suppliers intended to drive innovation, ensure availability and delivery of industry-leading quality raw materials and components, manage costs on a globally competitive basis, protect John Deere's intellectual property and minimize other supply-related risks. Supply chain risks monitored by John Deere to minimize the likelihood of the supply base causing business disruption include supplier financial viability, capacity, business continuity, quality, delivery and weather-related events including natural disasters. In fiscal year 2016, John Deere experienced no significant work stoppages as a result of shortages of raw materials or other commodities.

#### **Backlog Orders**

The dollar amount of backlog orders for the agriculture and turf segment believed to be firm was approximately \$4.2 billion at October 31, 2016, compared with \$4.2 billion at October 31, 2015. The agriculture and turf backlog is generally highest in the second and third quarters due to seasonal buying trends in these industries. John Deere generally produces and ships its construction and forestry equipment on average within approximately 60 days after an order is deemed to become firm. Therefore, no significant amount of construction and forestry backlog orders accumulates during any period.

#### **Trade Accounts and Notes Receivable**

Trade accounts and notes receivable arise primarily from sales of goods to independent dealers. Most trade receivables originated by the equipment operations are purchased by the financial services operations. The equipment operations compensate the financial services operations at approximate market rates of interest for these receivables. Additional information appears in Note 12 to the Consolidated Financial Statements.

#### **FINANCIAL SERVICES**

U.S. and Canada. The financial services segment primarily provides and administers financing for retail purchases from John Deere dealers of new equipment manufactured by John Deere's agriculture and turf and construction and forestry segments and used equipment taken in trade for this equipment.

The Company and John Deere Construction & Forestry Company (a wholly-owned subsidiary of the Company) are referred to as the "sales companies." John Deere Capital Corporation (Capital Corporation), a U.S. financial services subsidiary, generally purchases retail installment sales and loan contracts (retail notes) from the sales companies. These retail notes are acquired by the sales companies through John Deere retail dealers in the U.S. John Deere Financial Inc., a Canadian financial services subsidiary, purchases and finances retail notes acquired by John Deere Canada ULC, the Company's Canadian sales branch. The terms of retail notes and the basis on which the financial services operations acquire retail notes from the sales companies are governed by agreements with the sales companies. The financial services segment also finances and services revolving charge accounts, in most cases acquired from and offered through merchants in the agriculture and turf and construction and forestry markets (revolving charge accounts). Additionally, the financial services operations provide wholesale financing for inventories of John Deere agriculture and turf equipment and construction and forestry equipment owned by dealers of those products (wholesale notes). The various financing options offered by the financial services operations are designed to enhance sales of John Deere products and generate financing income for the financial services operations. In the U.S., certain subsidiaries included in the financial services segment offer extended equipment warranties.

Retail notes acquired by the sales companies are immediately sold to the financial services operations. The equipment operations are the financial services operations' major source of business, but many retail purchasers of John Deere products finance their purchases outside the John Deere organization through a variety of sources, including commercial banks and finance and leasing companies.

The financial services operations offer retail leases to equipment users in the U.S. A small number of leases are executed with units of local government. Leases are usually written for periods of four months to sixty months, and typically contain an option permitting the customer to purchase the equipment at the end of the lease term. Retail leases are also offered in a generally similar manner to customers in Canada through John Deere Financial Inc. and John Deere Canada ULC.

The financial services operations' terms for financing equipment retail sales (other than smaller items financed with unsecured revolving charge accounts) generally provide for retention of a security interest in the equipment financed. The financial services operations' guidelines for minimum down payments, which vary with the types of equipment and repayment provisions, are generally 10 percent to 30 percent of the purchase price. Finance charges are sometimes waived for specified periods or reduced on certain John Deere products sold or leased in advance of the season of use or in other sales promotions. The financial services operations generally receive compensation from the sales companies at approximate market interest rates for periods during which finance charges are waived or reduced on the retail notes or leases. The cost is accounted for as a deduction in arriving at net sales by the equipment operations.

The Company has an agreement with Capital Corporation to make payments to Capital Corporation such that its ratio of earnings to fixed charges is not less than 1.05 to 1 for any fiscal quarter. For 2016 and 2015, Capital Corporation's ratios were 2.22 to 1 and 3.42 to 1, respectively, and never less than 2.01 to 1 and 3.26 to 1 for any fiscal quarter of 2016 and 2015, respectively. The Company has also committed to continue to own, directly or through one or more wholly-owned subsidiaries, at least 51 percent of the voting shares of capital stock of Capital Corporation and to maintain Capital Corporation's consolidated tangible net worth at not less than \$50 million. The Company's obligations to make payments to Capital Corporation under the agreement are independent of whether Capital Corporation is in default on its indebtedness, obligations or other liabilities. Further, the Company's obligations under the agreement are not measured by the amount of Capital Corporation's indebtedness, obligations or other liabilities. The Company's obligations to make payments under this agreement are expressly stated not to be a guaranty of any specific indebtedness, obligation or liability of Capital Corporation and are enforceable only by or in the name of Capital Corporation. No payments were required under this agreement in 2016 or 2015.

Outside the U.S. and Canada. The financial services operations also offer financing, primarily for John Deere products, in Australia, Brazil, China, India, New Zealand, Russia, Thailand and in several other countries in Africa, Asia, Europe and Latin America. In certain areas, financing is offered through cooperation agreements or joint ventures. The manner in which the financial services operations offer financing in these countries is affected by a variety of country-specific laws, regulations and customs, including those governing property rights and debtor obligations, that are subject to change and that may introduce greater risk to the financial services operations.

The financial services operations also offer to select customers and dealers credit enhanced international export financing for the purchase of John Deere products.

Additional information on the financial services operations appears on pages 23-24, 26 and 28.

#### **ENVIRONMENTAL MATTERS**

John Deere is subject to a wide variety of local, state and federal environmental laws and regulations in the U.S., as well as the environmental laws and regulations of other countries in which John Deere conducts business. John Deere strives to comply and believes it is in compliance in all material respects with applicable laws and regulations. However, failure to comply with these regulations could lead to fines and other penalties. John Deere is involved in the evaluation and clean-up of a limited number of sites but does not expect that these matters or other expenses or liabilities John Deere may incur in connection with any noncompliance with environmental laws or regulations or the cleanup of any additional properties, will have a material adverse effect on the consolidated financial position, results of operations, cash flows or competitive position of John Deere. With respect to acquired properties and businesses or properties and businesses acquired in the future, John Deere conducts due diligence into potential exposure to environmental liabilities, but cannot be certain that it has identified or will identify all adverse environmental conditions. Compliance with these laws and regulations has added, and will continue to add, to the cost of John Deere's products.

The U.S. Environmental Protection Agency has issued stringent emissions regulations for off-road engines, and governmental agencies throughout the world are similarly enacting more stringent laws to reduce off-road engine emissions. John Deere has achieved and plans to continue to achieve compliance with these regulations through significant investments in the development of new engine technologies and after-treatment systems. Compliance with emissions regulations has added and will continue to add to the cost of John Deere's products.

#### **EMPLOYEES**

At October 31, 2016, John Deere had approximately 56,800 employees, including approximately 27,900 employees in the U.S. and Canada. John Deere also retains consultants, independent contractors, and temporary and part-time workers. Unions are certified as bargaining agents for approximately 84 percent of John Deere's U.S. production and maintenance employees. Approximately 7,600 of John Deere's active U.S. production and maintenance workers are covered by a collective bargaining agreement with the United Auto Workers (UAW), with an expiration date of October 1, 2021.

Unions also represent the majority of employees at John Deere manufacturing facilities outside the U.S.

#### **EXECUTIVE OFFICERS OF THE REGISTRANT**

Following are the names and ages of the executive officers of the Company, their positions with the Company and summaries of their backgrounds and business experience. All executive officers are elected or appointed by the Board of Directors and hold office until the annual meeting of the Board of Directors following the annual meeting of stockholders in each year.

Principal occupation during last

Name, age and office (at De	cember 1,	, 2016), and year elected to office		five years other than office of the Company currently held
Samuel R. Allen	63	Chairman and Chief Executive Officer	2010	Has held this position for the last five years
James M. Field	53	President, Agriculture & Turf Division-Global Harvesting & Turf Platforms, Americas and Australia	2012	2009 –2012 Senior Vice President and Chief Financial Officer
Jean H. Gilles	59	Senior Vice President, John Deere Power Systems, Worldwide Parts Services, Advanced Technology & Engineering and Global Supply Management and Logistics	2010	Has held this position for the last five years
Max A. Guinn	58	President, Worldwide Construction & Forestry	2014	2012 – 2014 Senior Vice President, Human Resources, Communications, Public Affairs and Labor Relations; 2009 – 2012 Senior Vice President Agriculture & Turf Division, Global Platform, Crop Harvesting
Marc A. Howze	53	Senior Vice President and Chief Administrative Officer	2016	2012 – 2016 Vice President, Global Human Resources & Employee Communications; 2012 Global Director, Cotton Harvesting Product Line; 2009 – 2012 Factory Manager, John Deere Turf Care
Mary K.W. Jones	48	Senior Vice President and General Counsel	2013	2010 – 2013 Vice President Global Human Resources
Rajesh Kalathur	48	Senior Vice President and Chief Financial Officer	2012	2012 Deputy Financial Officer; 2009 – 2012 Vice President, Sales & Marketing, China/India/South and East Asia/Sub-Saharan and South Africa, Agriculture & Turf Division
John C. May	47	President, Agricultural Solutions & Chief Information Officer	2012	2009 – 2012 Vice President, Agriculture & Turf Global Platform, Turf & Utility
Cory J. Reed	46	President, John Deere Financial	2016	2013 – 2016 Senior Vice President, Intelligent Solutions Group; 2012 – 2013 Senior Vice President, Global Marketing Services; 2011 – 2012 Vice President, Global Marketing Services Agricultural and Turf Division
Markwart von Pentz	53	President, Agriculture & Turf Division-Europe, Asia, Africa, and Global Tractor Platform	2012	2009 – 2012 President, Agriculture & Turf Division- Europe, CIS, Northern Africa, Middle East, Latin America, and Global Harvesting, Crop Care, Hay & Forage Products

#### ITEM 1A. RISK FACTORS.

The following risks are considered the most significant to John Deere's business based upon current knowledge, information and assumptions. This discussion of risk factors should be considered closely in conjunction with Management's Discussion and Analysis beginning on page 22, including the risks and uncertainties described in the Safe Harbor Statement on pages 24 and 25, and the Notes to Consolidated Financial Statements beginning on page 37. These risk factors and other forward-looking statements that relate to future events, expectations, trends and operating periods involve certain factors that are subject to change, and important risks and uncertainties that could cause actual results to differ materially. Some of these risks and uncertainties could affect particular lines of business, while others could affect all of the Company's businesses. Although each risk is discussed

separately, many are interrelated. The Company, except as required by law, undertakes no obligation to update or revise this risk factors discussion, whether as a result of new developments or otherwise. The risks described in this Annual Report on Form 10-K and the "Safe Harbor Statement" in this report are not the only risks faced by the Company.

International, national and regional trade laws, regulations and policies (particularly those related to or restricting global trade) and government farm programs and policies could significantly impair John Deere's profitability and growth prospects.

International, national and regional laws, regulations and policies directly or indirectly related to or restricting the import and export of John Deere's products, services and technology, including protectionist policies in particular jurisdictions or for the benefit of favored industries or sectors, could harm John Deere's multinational business and subject John Deere to civil and criminal sanctions. John Deere's profitability and growth prospects are tied directly to the global marketplace. Restricted access to global markets impairs John Deere's ability to export goods and services from its various manufacturing locations around the world, and limits the ability to access raw materials and high quality parts and components at competitive prices on a timely basis. Trade restrictions could limit John Deere's ability to capitalize on current and future growth opportunities in international markets and impair John Deere's ability to expand the business by offering new technologies, products and services. These restrictions may affect John Deere's competitive position. Additionally, John Deere's competitive position and results could be adversely affected by changes in—or uncertainty surrounding—U.S. trade policy. Furthermore, the ability to export agricultural and forestry commodities is critical to John Deere's agricultural and forestry customers. Policies impacting exchange rates and commodity prices or those limiting the export or import of commodities could have a material adverse effect on the international flow of agricultural and other commodities that may result in a corresponding negative effect on the demand for agricultural and forestry equipment in many areas of the world. John Deere's agricultural equipment sales could be especially harmed because farm income strongly influences sales of agricultural equipment around the world. Furthermore, trade restrictions could impede those in developing countries from achieving a higher standard of living, which could negatively impact John Deere's future growth opportunities arising from increasing global demand for food, fuel and infrastructure. Additionally, changes in government farm programs and policies, including direct payment and other subsidies, can significantly influence demand for agricultural equipment. Furthermore, embargoes and sanctions imposed by the U.S. and other governments restricting or prohibiting sales or transactions to specific persons, including financial institutions, or countries or based on product classification expose John Deere to potential criminal and civil sanctions. Although John Deere has a compliance program in place designed to reduce the likelihood of potential violations of import and export laws and sanctions, these laws and sanctions, particularly with respect to eastern Europe, Cuba, and Iran, are changing rapidly. Violations of these laws could have an adverse effect on John Deere's reputation, business and results of operations and financial condition.

Changes in government banking, monetary and fiscal policies could have a negative effect on John Deere.

Policies of the U.S. and other governments regarding banking, monetary and fiscal policies intended to promote or maintain liquidity, stabilize financial markets and/or address local deficit or structural economic issues may not be effective and could have a material impact on John Deere's customers and markets. John Deere's operations and results could also be impacted by financial regulatory reform that could have an adverse effect on the financial services segment and on John Deere's customers by limiting their ability to enter into hedging transactions or to finance purchases of John Deere products. Government policies on taxes and spending can also affect John Deere, especially the construction and forestry segment due to the impact of government spending on infrastructure development.

Changing worldwide demand for food and different forms of bio-energy could have an effect on the price of farm commodities and consequently the demand for certain John Deere equipment and could also result in higher research and development costs related to changing machine fuel requirements.

Changing worldwide demand for farm outputs to meet the world's growing food and bio-energy demands, driven in part by government policies and a growing world population, are likely to result in fluctuating agricultural commodity prices, which directly affect sales of agricultural equipment. Lower farm commodity prices directly affect farm incomes, which could negatively affect sales of agricultural equipment. While higher commodity prices benefit John Deere's crop-producing agricultural equipment customers, higher commodity prices also could result in greater feed costs for livestock and poultry producers which in turn may result in lower levels of equipment purchased by these customers. Furthermore, changing bio-fuel demands may cause farmers to change the types or quantities of the crops they raise, with corresponding changes in equipment demands. Finally, changes in governmental policies regulating bio-fuel utilization could affect demand for John Deere's diesel-fueled equipment and result in higher research and development costs related to equipment fuel standards.

As John Deere seeks to expand its business globally, growth opportunities may be impacted by greater political, economic and social uncertainty and the continuing and accelerating globalization of businesses could significantly change the dynamics of John Deere's competition, customer base and product offerings.

John Deere's efforts to grow its businesses depend to a large extent upon access to additional geographic markets including, but not limited to, Brazil, China, India and Russia, and its success in developing market share and operating profitably in such markets. In some cases, these countries have greater political and economic volatility, greater vulnerability to infrastructure and labor disruptions and differing local customer product preferences and requirements than John Deere's other markets. Operating and seeking to expand business in a number of different regions and countries exposes John Deere to multiple and potentially conflicting cultural practices, business practices and legal and regulatory requirements that are subject to change, including those related to tariffs and trade barriers, investments, property ownership rights, taxation, sanctions requirements, repatriation of earnings and advanced technologies. Expanding business operations globally also increases exposure to currency fluctuations which can materially affect the Company's financial results. As these emerging geographic markets become more important to John Deere, its competitors are also seeking to expand their production capacities and sales in these same markets. While John Deere maintains a positive corporate image and the John Deere brand is widely recognized and valued in its traditional markets, the brand is less well known in some emerging markets which could impede John Deere's efforts to successfully compete in these markets. Although John Deere is taking measures to adapt to these changing circumstances, John Deere's reputation and/or business results could be negatively affected should these efforts prove unsuccessful.

John Deere operates in highly competitive markets.

John Deere operates in a variety of highly competitive global and regional markets. John Deere competes worldwide with a number of other manufacturers and distributors that produce and sell similar products. John Deere competes on the basis of product performance, innovation and quality, distribution, customer service and price. Aggressive pricing or other strategies pursued by competitors, unanticipated product or manufacturing delays or John Deere's failure to price its products competitively could adversely affect John Deere's business, results of operations and financial condition.

John Deere's business results depend largely on its ability to understand its customers' specific preferences and requirements, and to develop, manufacture and market products that meet customer demand.

John Deere's ability to match new product offerings to diverse global customers' anticipated preferences for different types and sizes of equipment and various equipment features and functionality, at affordable prices, is critical to its success. This requires a thorough understanding of John Deere's existing and potential customers on a global basis, particularly in potentially high-growth and emerging markets, including Brazil, China, India and Russia. Failure to deliver quality products that meet customer needs at competitive prices ahead of competitors could have a significant adverse effect on John Deere's business.

Negative economic conditions and outlook can materially weaken demand for John Deere's equipment and services, limit access to funding and result in higher funding costs.

The demand for John Deere's products and services can be significantly reduced in an economic environment characterized by high unemployment, cautious consumer spending, lower corporate earnings, U.S. budget issues and lower business investment. Negative or uncertain economic conditions causing John Deere's customers to lack confidence in the general economic outlook can significantly reduce their likelihood of purchasing John Deere's equipment. Sustained negative economic conditions and outlook affect housing starts and other construction which dampens demand for certain construction equipment. John Deere's turf operations and its construction and forestry business are dependent on construction activity and general economic conditions. Decreases in construction activity and housing starts could have a material adverse effect on John Deere's results of operations. If negative economic conditions affect the overall farm economy, there could be a similar effect on John Deere's agricultural equipment sales. In addition, uncertain or negative outlook with respect to ongoing U.S. budget issues as well as general economic conditions and outlook can cause significant changes in market liquidity conditions. Such changes could impact access to funding and associated funding costs, which could reduce the Company's earnings and cash flows. Additionally, the Company's investment management activities could be adversely affected by changes in the equity and bond markets, which would negatively affect earnings.

In addition, demand for John Deere's products and services can be significantly reduced by concerns regarding the diverse economic and political circumstances of the individual countries in the eurozone, the debt burden of certain eurozone countries and their ability to meet future financial obligations, uncertainty related to the potential withdrawal of the United Kingdom from the European Union, and the long term stability of the euro as a single common currency. Persistent disparity with respect to the widely varying economic conditions within the individual countries in the eurozone, and its implications for the euro as well as market perceptions concerning these and related issues, could adversely affect the value of the Company's eurodenominated assets and obligations, have an adverse effect on demand for John Deere's products and services in the eurozone and have an adverse effect on financial markets in Europe and globally. More specifically, it could affect the ability of John Deere's customers, suppliers and lenders to finance their respective businesses, to access liquidity at acceptable financing costs, if at all, and the availability of supplies and materials and on the demand for John Deere's products.

The Company's consolidated financial results are reported in U.S. dollars while certain assets and other reported items are denominated in the currencies of other countries, creating currency exchange and translation risk.

John Deere operates in many areas of the world, involving transactions denominated in a variety of currencies. John Deere is subject to currency exchange risk to the extent that its costs are denominated in currencies other than those in which John Deere earns revenues.

Additionally, the reporting currency for the Company's consolidated financial statements is the U.S. dollar. Certain of John Deere's assets, liabilities, expenses and revenues are denominated in other countries' currencies. Those assets, liabilities, expenses and revenues are translated into U.S. dollars at the applicable exchange rates to prepare the Company's consolidated financial statements. Therefore, increases or decreases in exchange rates between the U.S. dollar and those other currencies affect the value of those items as reflected in the Company's consolidated financial statements, even if their value remains unchanged in their original currency. Substantial fluctuations in the value of the U.S. dollar could have a significant impact on John Deere's results.

Because the financial services segment provides financing for a significant portion of John Deere's sales worldwide, John Deere's operations and financial results could be impacted materially should negative economic conditions affect the financial industry.

In recent years, negative economic conditions have frequently had an adverse effect on the financial industry in which the financial services segment operates. The financial services segment provides financing for a significant portion of John Deere's sales worldwide. The financial services segment is exposed to the risk that customers and others will default on contractual obligations. The financial services segment may experience credit losses that exceed its expectations and adversely affect its financial condition and results of operations. The financial services segment's inability to access funds at cost-effective rates to support its financing activities could have a material adverse effect on John Deere's business. The financial services segment's liquidity and ongoing profitability depend largely on timely access to capital in order to meet future cash flow requirements and to fund operations and costs associated with engaging in diversified funding activities. Additionally, negative market conditions could reduce customer confidence levels, resulting in declines in credit applications and increases in delinquencies and default rates, which could materially impact the financial services segment's write-offs and provision for credit losses. The financial services segment may also experience residual value losses that exceed its expectations caused by lower pricing for used equipment and higher than expected equipment returns at lease maturity.

John Deere's equipment operations and financial services segments are subject to interest rate risks. Changes in interest rates can reduce demand for equipment, adversely affect interest margins and limit the ability to access capital markets while increasing borrowing costs.

Rising interest rates could have a dampening effect on overall economic activity and/or the financial condition of John Deere's customers, either or both of which could negatively affect customer demand for John Deere equipment and customers' ability to repay obligations to John Deere. In addition, credit market dislocations could have an impact on funding costs which are very important to John Deere's financial services segment because such costs affect the segment's ability to offer customers competitive financing rates. While the Company strives to match the interest rate characteristics of our financial assets and liabilities, changing interest rates could have an adverse effect on the Company's net interest rate margin—the difference between the yield the Company earns on its assets and the interest rates the Company pays for funding, which could in turn affect the Company's net interest income and earnings. Actions by credit rating agencies, such as downgrades or negative changes to ratings outlooks, can affect the availability and cost of funding for the Company and can increase the Company's cost of capital and hurt its competitive position.

The potential loss of John Deere intellectual property through trade secret theft, infringement of patents, trademark counterfeiting, or other loss of rights to exclusive use of John Deere intellectual property may have a material adverse effect on the Company. Our products may infringe the intellectual property rights of others.

John Deere relies on a combination of patents, trademarks, trade secret laws, and confidentiality agreements to protect our intellectual property rights. In particular, we heavily rely on certain John Deere trademarks, which contribute to John Deere's identity and the recognition of its products and services, including but not limited to the "John Deere" mark, the leaping deer logo, the "Nothing Runs Like a Deere" slogan and the prefix "JD" associated with many products and the green and yellow equipment colors. These trademarks, as well as the many patents used in our products, are integral to the John Deere business, and their loss could have a material adverse effect on the Company.

Additionally, third parties may initiate litigation to challenge the validity of our patents or allege that we infringe their patents. We may incur substantial costs if our competitors or other third parties initiate litigation to challenge the validity of our patents or allege that we infringe their patents, or if we initiate any proceedings to protect our proprietary rights. If the outcome of any such litigation is unfavorable to us, our business could be adversely affected. We also cannot be certain that our products or technologies have not infringed or will not infringe the proprietary rights of others. Any such infringement could cause third parties, including our competitors, to bring claims against us, resulting in significant costs, possible damages and substantial uncertainty.

John Deere is subject to extensive anti-corruption laws and regulations.

John Deere's global operations must comply with all applicable anti-corruption laws, including the U.S. Foreign Corrupt Practices Act and the UK Bribery Act. These anti-corruption laws generally prohibit companies and their intermediaries from making improper payments or providing anything of value to improperly influence government officials or private individuals for the purpose of obtaining or retaining a business advantage regardless of whether those practices are legal or culturally expected in a particular jurisdiction. Recently, there has been a substantial increase in the global enforcement of anti-corruption laws. Although John Deere has a compliance program in place designed to reduce the likelihood of potential violations of such laws, violations of these laws could result in criminal or civil sanctions and have an adverse effect on John Deere's reputation, business and results of operations and financial condition.

The Dodd-Frank Wall Street Reform and Consumer Protection Act (Act) and the regulations implementing the Act impose additional supervisory, financial and reporting requirements and compliance costs on John Deere and John Deere's financial services operations and could therefore adversely affect John Deere and its financial services segment.

The Act was enacted on July 21, 2010 to broadly reform practices in the financial services industry, including equipment financing and securitizations. The Act directs federal agencies, including the Consumer Financial Protection Bureau, the Board of Governors of the Federal Reserve System, the Commodity Futures Trading Commission, the Federal Deposit Insurance Corporation and others, to adopt rules to regulate depository institutions, systemically important financial institutions, holding companies, the consumer finance industry and the capital markets, including certain commercial transactions such as derivatives contracts. Although the effects of the Act on the capital markets and the financial industry will not be fully known until all the regulations have been finalized and implemented, the Act and its regulations impose, or may impose, additional reporting, stress testing, leverage, liquidity, and capital requirements; and other supervisory and financial standards and restrictions that increase regulatory compliance costs for John Deere and John Deere's financial services operations and could adversely affect John Deere and its financial services segment's funding activities, liquidity, structure (including relationships with affiliates), operations and performance. Moreover, John Deere's operations, including those outside of the United States, will also be impacted by non-U.S. regulatory reforms, including Basel III, being implemented to further regulate non-U.S. financial institutions and markets.

John Deere's business may be directly and indirectly affected by unfavorable weather conditions or natural disasters that reduce agricultural production and demand for agriculture and turf equipment.

Poor or unusual weather conditions, particularly during the planting and early growing season, can significantly affect the purchasing decisions of John Deere's customers, particularly the purchasers of agriculture and turf equipment. The timing and quantity of rainfall are two of the most important factors in agricultural production. Insufficient levels of rain prevent farmers from planting new crops and may cause growing crops to die or result in lower yields. Excessive rain or flooding can prevent planting from occurring at optimal times, and may cause crop loss through increased disease or mold growth. Temperatures outside normal ranges can also cause crop failure or decreased yields, and may also affect disease incidence. Temperature affects the rate of growth, crop maturity and crop quality. Natural calamities such as regional floods, hurricanes or other storms, and droughts can have significant negative effects on agricultural and livestock production. The resulting negative impact on farm income can strongly affect demand for agricultural equipment. Sales of turf equipment, particularly during the important spring selling season, can be dramatically impacted by weather. Adverse weather conditions in a particular geographic region may adversely affect sales of some turf equipment. Drought conditions can adversely affect sales of certain mowing equipment and unusually rainy weather can similarly cause lower sales volumes.

Changes in the availability and price of certain raw materials, components and whole goods could result in production disruptions or increased costs and lower profits on sales of John Deere products.

John Deere requires access to various raw materials, components and whole goods at competitive prices to manufacture and distribute its products. Changes in the availability and price of these raw materials, components and whole goods, which have fluctuated significantly in the past and are more likely to fluctuate during times of economic volatility, can significantly increase the costs of production which could have a material negative effect on the profitability of the business, particularly if John Deere, due to pricing considerations or other factors, is unable to recover the increased costs from its customers. John Deere relies on suppliers to acquire raw materials, components and whole goods required to manufacture its products. Certain components and parts used in John Deere's products are available from a single supplier and cannot be re-sourced quickly. Supply chain disruptions due to supplier financial distress, capacity constraints, business continuity, quality, delivery or disruptions due to weather-related or natural disaster events could affect John Deere's operations and profitability.

John Deere's operations, suppliers and customers are subject to and affected by increasingly rigorous environmental, health and safety laws and regulations of federal, state and local authorities in the U.S. and various regulatory authorities with jurisdiction over John Deere's international operations. In addition, private civil litigation on these subjects has increased, primarily in the U.S.

Enforcement actions arising from violations of environmental, health and safety laws or regulations can lead to investigation and defense costs, and result in significant fines or penalties. In addition, new or more stringent requirements of governmental authorities could prevent or restrict John Deere's operations, or those of our suppliers and customers, require significant expenditures to achieve compliance and/or give rise to civil or criminal liability. There can be no assurance that violations of such legislation and/or regulations, or private civil claims for damages to property or personal injury arising from the environmental, health or safety impacts of John Deere's operations, or those of our suppliers and customers, would not have consequences that result in a material adverse effect on John Deere's business, financial condition or results of operations.

Increasingly stringent engine emission standards could impact John Deere's ability to manufacture and distribute certain engines or equipment, which could negatively affect business results.

John Deere's equipment operations must meet increasingly stringent engine emission reduction standards, including Final Tier 4 non-road diesel emission requirements in the U.S. and the European Union's Stage IV standard and recently enacted Stage V standard. In addition, governmental agencies throughout the world are enacting more stringent laws and regulations to reduce off-road engine emissions. These standards are applicable to many engines manufactured by John Deere and used in many models of John Deere agriculture and construction and forestry equipment. John Deere has incurred and continues to incur substantial research and development costs and is introducing many new equipment models, largely due to the implementation of these more rigorous standards. While John Deere has developed and is executing comprehensive plans to meet these requirements and does not currently foresee significant obstacles that would prevent timely compliance, these plans are subject to many variables that could delay or otherwise affect John Deere's ability to manufacture and distribute certain equipment or engines, which could negatively impact business results.

John Deere may incur increased costs due to new or more stringent greenhouse gas emission standards designed to address climate change and could be further impacted by physical effects attributed to climate change on its facilities, suppliers and customers.

There is a political and scientific consensus that emissions of greenhouse gases (GHG) continue to alter the composition of Earth's atmosphere in ways that are affecting and are expected to continue to affect the global climate. These considerations may lead to international, national, regional or local legislative or regulatory responses in the future. Various stakeholders, including legislators and regulators, shareholders and non-governmental organizations, as well as companies in many business sectors, including John Deere, are considering ways to reduce GHG emissions. The regulation of GHG emissions from certain stationary or mobile sources could result in additional costs to John Deere in the form of taxes or emission allowances, facilities improvements and energy costs, which would increase John Deere's operating costs through higher utility, transportation and materials costs. Increased input costs, such as fuel and fertilizer, and compliance-related costs could also impact customer operations and demand for John Deere equipment. Because the impact of any future GHG legislative, regulatory or product standard requirements on John Deere's global businesses and products is dependent on the timing and design of mandates or standards, John Deere is unable to predict its potential impact at this time.

Furthermore, the potential physical impacts of climate change on John Deere's facilities, suppliers and customers and therefore on John Deere's operations are highly uncertain and will be particular to the circumstances developing in various geographical regions. These may include long-term changes in temperature levels and water availability. These potential physical effects may adversely impact the demand for John Deere's products and the cost, production, sales and financial performance of John Deere's operations.

Security breaches and other disruptions to John Deere's information technology infrastructure could interfere with John Deere's operations and could compromise John Deere's and its customers' and suppliers' information, exposing John Deere to liability that would cause John Deere's business and reputation to suffer.

In the ordinary course of business, John Deere relies upon information technology networks and systems, some of which are managed by third parties, to process, transmit and store electronic information, and to manage or support a variety of business processes and activities, including supply chain, manufacturing, distribution, invoicing and collection of payments from dealers or other purchasers of John Deere equipment and from customers of John Deere's financial services operations. John Deere uses information technology systems to record, process and summarize financial information and results of operations for internal reporting purposes and to comply with regulatory financial reporting, legal and tax requirements. Additionally, John Deere collects and stores sensitive data, including intellectual property, proprietary business information and the proprietary business information of John Deere's customers and employees, in data centers and on information technology networks. The secure operation of these information technology networks and the processing and maintenance of this

information is critical to John Deere's business operations and strategy. Despite security measures and business continuity plans, John Deere's information technology networks and infrastructure may be vulnerable to damage, disruptions or shutdowns due to attacks by cyber criminals or breaches due to employee error or malfeasance or other disruptions during the process of upgrading or replacing computer software or hardware, power outages, computer viruses, telecommunication or utility failures, terrorist acts or natural disasters or other catastrophic events. The occurrence of any of these events could compromise John Deere's networks, and the information stored there could be accessed, publicly disclosed, lost or stolen. Any such access, disclosure or other loss of information could result in legal claims or proceedings, liability or regulatory penalties under laws protecting the privacy of personal information, disrupt operations, and damage John Deere's reputation, which could adversely affect John Deere's business. In addition, as security threats continue to evolve we may need to invest additional resources to protect the security of our systems.

John Deere is subject to governmental laws, regulations and other legal obligations related to privacy and data protection.

The legislative and regulatory framework for privacy and data protection issues worldwide is rapidly evolving and is likely to remain uncertain for the foreseeable future. John Deere collects personally identifiable information (PII) and other data as an integral part of its business processes and activities. This data is subject to a variety of U.S. and international laws and regulations, including oversight by various regulatory or other governmental bodies. Many foreign countries and governmental bodies, including the European Union, Canada, and other relevant jurisdictions where we conduct business, have laws and regulations concerning the collection and use of PII and other data obtained from their residents or by businesses operating within their jurisdiction that are more restrictive than those in the U.S. Additionally, in May 2016, the European Union adopted the General Data Protection Regulation that will impose more stringent data protection requirements and will provide for greater penalties for noncompliance beginning in May 2018. Any inability, or perceived inability, to adequately address privacy and data protection concerns, even if unfounded, or comply with applicable laws, regulations, policies, industry standards, contractual obligations, or other legal obligations could result in additional cost and liability to us or company officials, damage our reputation, inhibit sales, and otherwise adversely affect our business.

John Deere's ability to execute its strategy is dependent upon the ability to attract, train and retain qualified personnel.

John Deere's continued success depends, in part, on its ability to identify, attract, motivate, train and retain qualified personnel in key functions. In particular, John Deere is dependent on its ability to identify, attract, motivate, train and retain qualified personnel with the requisite education, background and industry experience. Failure to attract, train and retain qualified personnel, whether as a result of an insufficient number of qualified applicants, difficulty in recruiting new personnel, or the allocation of inadequate resources to training, integration and retention of qualified personnel, could impair John Deere's ability to execute its business strategy and could adversely affect John Deere's business. In addition, while John Deere strives to reduce the impact of the departure of its employees, John Deere's operations or ability to execute its business strategy may be impacted by the loss of personnel.

Sustained increases in funding obligations under the Company's pension plans may impair the Company's liquidity or financial condition.

The Company maintains certain defined benefit pension plans for certain employees, which impose funding obligations. The Company uses many assumptions in calculating its future payment obligations under the plans. Significant adverse changes in credit or market conditions could result in actual rates of returns on pension investments being lower than expected. The Company may be required to make significant contributions to its pension plans in the future. These factors could significantly increase the Company's payment obligations under the plans and adversely affect its business, results of operations and financial condition.

The reallocation of radio frequency (RF) spectrums could disrupt or degrade the reliability of John Deere's high precision augmented Global Positioning System (GPS) technology, which could impair John Deere's ability to develop and market GPS-based technology solutions as well as significantly reduce agricultural and construction customers' profitability.

John Deere's current and planned integrated agricultural business and equipment management systems, as well as its fleet management telematics solutions for construction equipment, depend upon the use of RF signals. These signals include, but are not limited to, GPS signals, other GPS-like satellite signals, augmented GPS services and other RF equipment which link equipment, operations, owners, dealers and technicians. These radio services depend on frequency allocations governed by international and national agencies. Any international or national reallocation of frequency bands, including frequency bands segmentation and band spectrum sharing, or other modifications concerning the regulation of frequency bands, could significantly disrupt or degrade the utility and reliability of John Deere's GPS-based products, which could negatively affect John Deere's ability to develop and market GPS-based technology solutions. For John Deere's agricultural customers, the inability to use high-precision augmented GPS signals or other RF signals could result in lower crop yields and higher equipment maintenance, seed, fertilizer, fuel and wage costs. For construction customers, disrupting GPS or RF applications could result in higher fuel and equipment maintenance costs, as well as lower construction design and project management efficiencies. These cost increases could significantly reduce customers' profitability and demand for John Deere products.

ITEM 1B. UNRESOLVED STAFF COMMENTS.

None.

ITEM 2. PROPERTIES.

See "Manufacturing" in Item 1.

The equipment operations own or lease nine facilities housing one centralized parts distribution center and eight regional parts depots and distribution centers throughout the U.S. and Canada. These facilities contain approximately 4.7 million square feet of floor space. Outside the U.S. and Canada, the equipment operations also own or lease and occupy buildings housing four centralized parts distribution centers in Brazil, Germany, India and Russia and regional parts depots and distribution centers in Argentina, Australia, China, Mexico, South Africa, Sweden and the United Kingdom. These facilities contain approximately 2.9 million square feet of floor space. John Deere also owns and leases facilities for the manufacture and distribution of other brands of replacement parts containing approximately 1.4 million square feet.

The Company's administrative offices and research facilities, which are owned and leased by John Deere, contain about 3.8 million square feet of floor space globally and miscellaneous other facilities total 4.1 million square feet globally.

Overall, John Deere owns approximately 59.1 million square feet of facilities and leases approximately 15.2 million additional square feet in various locations.

ITEM 3. LEGAL PROCEEDINGS.

John Deere is subject to various unresolved legal actions which arise in the normal course of its business, the most prevalent of which relate to product liability (including asbestos-related liability), retail credit, employment, patent, and trademark matters. John Deere believes the reasonably possible range of losses for these unresolved legal actions in addition to the amounts accrued would not have a material effect on its financial statements.

ITEM 4. MINE SAFETY DISCLOSURES.

Not applicable.

#### **PART II**

- ITEM 5. MARKET FOR REGISTRANT'S COMMON EQUITY, RELATED STOCKHOLDER MATTERS AND ISSUER PURCHASES OF EQUITY SECURITIES.
- (a) The Company's common stock is listed on the New York Stock Exchange. See the information concerning quoted prices of the Company's common stock, the number of stockholders and the data on dividends declared and paid per share in Notes 29 and 30 to the Consolidated Financial Statements.
- (b) Not applicable.

(c) The Company's purchases of its common stock during the fourth quarter of 2016 were as follows:

#### ISSUER PURCHASES OF EQUITY SECURITIES

Maximum

<u>Period</u>	Total Number of Shares Purchased (thousands)	Average Price Paid Per Share	Total Number of Shares Purchased as Part of Publicly Announced Plans or Programs (1) (thousands)	Number of Shares that May Yet Be Purchased under the Plans or Programs (1) (millions)
Aug 1 to Aug 31				37.4
Sept 1 to Sept 30				37.4
Oct 1 to Oct 31				37.4
Total				

<sup>(1)</sup> During the fourth quarter of 2016, the Company had a share repurchase plan that was announced in December 2013 to purchase up to \$8,000 million of shares of the Company's common stock. The maximum number of shares above that may yet be purchased under the \$8,000 million plan was based on the end of the fourth quarter closing share price of \$87.17 per share. At the end of the fourth quarter, \$3,260 million of common stock remains to be purchased under this plan.

#### ITEM 6. SELECTED FINANCIAL DATA.

#### **Financial Summary**

(Millions of dollars except per share amounts)	2016	2015	2014	2013	2012
For the Year Ended October 31:	 		 		
Total net sales and revenues	\$ 26,644	\$ 28,863	\$ 36,067	\$ 37,795	\$ 36,157
Net income attributable to Deere & Company	\$ 1,524	\$ 1,940	\$ 3,162	\$ 3,537	\$ 3,065
Net income per share — basic	\$ 4.83	\$ 5.81	\$ 8.71	\$ 9.18	\$ 7.72
Net income per share — diluted	\$ 4.81	\$ 5.77	\$ 8.63	\$ 9.09	\$ 7.63
Dividends declared per share	\$ 2.40	\$ 2.40	\$ 2.22	\$ 1.99	\$ 1.79
At October 31:					
Total assets	\$ 57,981	\$ 57,948	\$ 61,336	\$ 59,521	\$ 56,266
Long-term borrowings	\$ 23,760	\$ 23,833	\$ 24,381	\$ 21,578	\$ 22,453

ITEM 7. MANAGEMENT'S DISCUSSION AND ANALYSIS OF FINANCIAL CONDITION AND RESULTS OF OPERATIONS.

See the information under the caption "Management's Discussion and Analysis" on pages 22 — 31.

#### ITEM 7A. QUANTITATIVE AND QUALITATIVE DISCLOSURES ABOUT MARKET RISK.

The Company is exposed to a variety of market risks, including interest rates and currency exchange rates. The Company attempts to actively manage these risks. See the information under "Management's Discussion and Analysis" beginning on page 22 and in Note 27 to the Consolidated Financial Statements.

#### ITEM 8. FINANCIAL STATEMENTS AND SUPPLEMENTARY DATA.

See the Consolidated Financial Statements and notes thereto and supplementary data on pages 32-69.

ITEM 9. CHANGES IN AND DISAGREEMENTS WITH ACCOUNTANTS ON ACCOUNTING AND FINANCIAL DISCLOSURE.

Not applicable.

#### ITEM 9A. CONTROLS AND PROCEDURES.

#### **Disclosure Controls and Procedures**

The Company's principal executive officer and its principal financial officer have concluded that the Company's disclosure controls and procedures (as defined in Rules 13a-15(e) and 15d-15(e) of the Securities Exchange Act of 1934, as amended (the Exchange Act)) were effective as of October 31, 2016, based on the evaluation of these controls and procedures required by Rule 13a-15(b) or 15d-15(b) of the Exchange Act.

### Management's Report on Internal Control Over Financial Reporting

The Company's management is responsible for establishing and maintaining adequate internal control over financial reporting. The Company's internal control system was designed to provide reasonable assurance regarding the preparation and fair presentation of published financial statements in accordance with generally accepted accounting principles.

All internal control systems, no matter how well designed, have inherent limitations. Therefore, even those systems determined to be effective can provide only reasonable assurance with respect to financial statement preparation and presentation in accordance with generally accepted accounting principles.

Management assessed the effectiveness of the Company's internal control over financial reporting as of October 31, 2016, using the criteria set forth in Internal Control - Integrated Framework (2013) issued by the Committee of Sponsoring Organizations of the Treadway Commission. Based on that assessment, management believes that, as of October 31, 2016, the Company's internal control over financial reporting was effective.

The Company's independent registered public accounting firm has issued an audit report on the effectiveness of the Company's internal control over financial reporting. That report is included herein.

ITEM 9B. OTHER INFORMATION.

Not applicable.

#### **PART III**

#### ITEM 10. DIRECTORS, EXECUTIVE OFFICERS AND CORPORATE GOVERNANCE.

The information regarding directors in the definitive proxy statement expected to be filed no later than January 13, 2017 (proxy statement), under the captions "Election of Directors," and in the second bullet point in the "Audit Review Committee" item under the caption "Board Committees," is incorporated herein by reference. Information regarding executive officers is presented in Item 1 of this report under the caption "Executive Officers of the Registrant."

The Company has adopted a code of ethics that applies to its principal executive officer, principal financial officer and principal accounting officer. This code of ethics and the Company's corporate governance policies are posted on the Company's website at <a href="http://www.JohnDeere.com">http://www.JohnDeere.com</a>. The Company intends to satisfy disclosure requirements regarding amendments to or waivers from its code of ethics by posting such information on this website. The charters of the Audit Review, Corporate Governance, Compensation and Finance committees of the Company's Board of Directors are available on the Company's website as well. This information is also available in print free of charge to any person who requests it.

#### ITEM 11. EXECUTIVE COMPENSATION.

The information in the proxy statement under the captions "Compensation of Directors," "Compensation Discussion & Analysis," "Compensation Committee Report" and "Executive Compensation Tables" is incorporated herein by reference.

#### ITEM 12. SECURITY OWNERSHIP OF CERTAIN BENEFICIAL OWNERS AND MANAGEMENT AND RELATED STOCKHOLDER MATTERS.

(a) Securities authorized for issuance under equity compensation plans.

Equity compensation plan information in the proxy statement under the caption "Equity Compensation Plan Information" is incorporated herein by reference.

(b) Security ownership of certain beneficial owners.

The information on the security ownership of certain beneficial owners in the proxy statement under the caption "Security Ownership of Certain Beneficial Owners and Management" is incorporated herein by reference.

(c) Security ownership of management.

The information on shares of common stock of the Company beneficially owned by, and under option to (i) each director, (ii) certain named executive officers and (iii) the directors and officers as a group, contained in the proxy statement under the captions "Security Ownership of Certain Beneficial Owners and Management" and "Executive Compensation Tables - Outstanding Equity Awards at Fiscal 2016 Year-End" is incorporated herein by reference.

(d) Change in control.

None.

ITEM 13. CERTAIN RELATIONSHIPS AND RELATED TRANSACTIONS, AND DIRECTOR INDEPENDENCE.

The information in the proxy statement under the captions "Our Values," "Director Independence" and "Review and Approval of Related Person Transactions" is incorporated herein by reference.

ITEM 14. PRINCIPAL ACCOUNTANT FEES AND SERVICES.

The information in the proxy statement under the caption "Fees Paid to the Independent Registered Public Accounting Firm" is incorporated herein by reference.

#### **PART IV**

#### ITEM 15. EXHIBITS AND FINANCIAL STATEMENT SCHEDULES.

(1)	Financial Statements	Page
	Statement of Consolidated Income for the years ended October 31, 2016, 2015 and 2014	<u>32</u>
	Statement of Consolidated Comprehensive Income for the years ended October 31, 2016, 2015 and 2014	<u>33</u>
	Consolidated Balance Sheet as of October 31, 2016 and 2015	<u>34</u>
	Statement of Consolidated Cash Flows for the years ended October 31, 2016, 2015 and 2014	<u>35</u>
	Statement of Changes in Consolidated Stockholders' Equity for the years ended October 31, 2016, 2015 and 2014	<u>36</u>
	Notes to Consolidated Financial Statements	<u>37</u>
(2)	Schedule to Consolidated Financial Statements	
	Schedule II—Valuation and Qualifying Accounts for the years ended October 31, 2016, 2015 and 2014	<u>73</u>
(3)	Exhibits	

#### See the "Index to Exhibits" on pages 74 - 76 of this report

Certain instruments relating to long-term borrowings, constituting less than 10 percent of registrant's total assets, are not filed as exhibits herewith pursuant to Item 601(b)4(iii)(A) of Regulation S-K. Registrant agrees to file copies of such instruments upon request of the Commission.

#### **Financial Statement Schedules Omitted**

The following schedules for the Company and consolidated subsidiaries are omitted because of the absence of the conditions under which they are required: I, III, IV and V.

### RESULTS OF OPERATIONS FOR THE YEARS ENDED OCTOBER 31, 2016, 2015 AND 2014

#### **OVERVIEW**

#### Organization

The company's equipment operations generate revenues and cash primarily from the sale of equipment to John Deere dealers and distributors. The equipment operations manufacture and distribute a full line of agricultural equipment; a variety of commercial and consumer equipment; and a broad range of equipment for construction and forestry. The company's financial services primarily provide credit services, which mainly finance sales and leases of equipment by John Deere dealers and trade receivables purchased from the equipment operations. In addition, financial services offers extended equipment warranties. The information in the following discussion is presented in a format that includes information grouped as consolidated, equipment operations and financial services. The company also views its operations as consisting of two geographic areas, the U.S. and Canada, and outside the U.S. and Canada. The company's operating segments consist of agriculture and turf, construction and forestry, and financial services.

#### **Trends and Economic Conditions**

The company's agriculture and turf equipment sales decreased 7 percent in 2016 and are forecast to decrease 1 percent for 2017. Industry agricultural machinery sales in the U.S. and Canada for 2017 are forecast to decrease 5 to 10 percent, compared to 2016. Industry sales in the European Union (EU)28 member nations are forecast to decline approximately 5 percent in 2017, while South American industry sales are projected to increase about 15 percent from 2016 levels. Asian sales are projected to be about the same or increase slightly in 2017. Industry sales of turf and utility equipment in the U.S. and Canada are expected to be approximately the same for 2017. The company's construction and forestry sales decreased 18 percent in 2016 and are forecast to increase about 1 percent in 2017. Global forestry industry sales are expected to be approximately the same in 2017, compared to 2016. Net income of the company's financial services operations attributable to Deere & Company in 2017 is expected to be approximately \$480 million.

Items of concern include the uncertainty of the effectiveness of governmental actions in respect to monetary and fiscal policies, the global economic recovery, the impact of sovereign debt, eurozone issues, capital market disruptions, trade agreements, changes in demand and pricing for used equipment, and geopolitical events. Significant fluctuations in foreign currency exchange rates and volatility in the price of many commodities could also impact the company's results. Designing and producing products with engines that continue to meet high performance standards and increasingly stringent emissions regulations is one of the company's major priorities.

The company completed a successful year in spite of continuing weakness in the global agricultural and construction equipment sectors. The results reflect adept execution of the operating plans and disciplined cost management as well as the impact of a broad product portfolio. The forecast calls for lower results in

2017, but the outlook is considerably better than in earlier downturns with a more durable business model and a focus on further efficiency gains. The company remains in a strong position to carry out its growth plans and attract new customers throughout the world. The company is confident in the present direction and believes it will provide value to customers and investors in the future.

#### 2016 COMPARED WITH 2015

#### **CONSOLIDATED RESULTS**

Worldwide net income attributable to Deere & Company in 2016 was \$1,524 million, or \$4.81 per share diluted (\$4.83 basic), compared with \$1,940 million, or \$5.77 per share diluted (\$5.81 basic), in 2015. Worldwide net sales and revenues decreased 8 percent to \$26,644 million in 2016, compared with \$28,863 million in 2015. Net sales of the worldwide equipment operations declined 9 percent in 2016 to \$23,387 million from \$25,775 million last year. Sales included price realization of 2 percent and an unfavorable currency translation effect of 2 percent. Equipment net sales in the United States and Canada decreased 13 percent for 2016. Outside the U.S. and Canada, net sales decreased 3 percent for the year, with an unfavorable currency translation effect of 4 percent for 2016.

Worldwide equipment operations had an operating profit of \$1,880 million in 2016, compared with \$2,177 million in 2015. The operating profit decline was primarily on account of reduced shipment volumes, the unfavorable effects of foreign currency exchange and a less favorable product mix, partially offset by price realization, lower production costs, lower selling, administrative and general expenses and a gain on the sale of a partial interest in the unconsolidated affiliate SiteOne Landscape Supply, Inc. (SiteOne) (see Note 5).

Net income of the company's equipment operations was \$1,058 million for 2016, compared with \$1,308 million in 2015. In addition to the operating factors mentioned above, a higher effective tax rate in 2016 reduced net income.

Net income of the financial services operations attributable to Deere & Company in 2016 decreased to \$468 million, compared with \$633 million in 2015. The decline was primarily due to less favorable financing spreads, higher losses on lease residual values (see Note 5), and a higher provision for credit losses. Prior year results benefited from a gain on the sale of the crop insurance business (see Note 4). Additional information is presented in the following discussion of the "Worldwide Financial Services Operations."

The cost of sales to net sales ratio for 2016 was 78.0 percent, compared with 78.1 percent last year. The decrease was due primarily to price realization and lower production costs, largely offset by the unfavorable effects of foreign currency exchange and the impact of a less favorable product mix.

Finance and interest income increased in 2016 due to a larger average leasing portfolio, partially offset by a lower average financing receivables portfolio. Other income increased due primarily to a gain on the sale of a partial interest in SiteOne (see Note 5) and was primarily offset by the gain on the sale of the Crop Insurance operations in 2015 (see Note 4). Research and development costs decreased largely due to a lower level of activity and the favorable effects of currency translation. Selling, administrative and general expenses decreased due primarily to

lower pension and postretirement benefit expenses, lower incentive compensation expense and the favorable effects of currency translation, partially offset by a higher provision for credit losses. Interest expense increased due to higher average interest rates, partially offset by lower average borrowings. Other operating expenses increased primarily due to higher depreciation of equipment on operating leases, and higher losses and impairments on lease residual values.

The company has several defined benefit pension plans and defined benefit health care and life insurance plans. The company's postretirement benefit costs for these plans in 2016 were \$312 million, compared with \$512 million in 2015. The long-term expected return on plan assets, which is reflected in these costs, was an expected gain of 7.3 percent in 2016 and 2015, or \$810 million in 2016 and \$824 million in 2015. The actual return was a gain of \$645 million in 2016 and \$606 million in 2015. In 2017, the expected return will be approximately 7.2 percent. The company's postretirement costs in 2017 are expected to increase approximately \$30 million. The company makes any required contributions to the plan assets under applicable regulations and voluntary contributions from time to time based on the company's liquidity and ability to make tax-deductible contributions. Total company contributions to the plans were \$127 million in 2016 and \$131 million in 2015, which include direct benefit payments for unfunded plans. These contributions also included voluntary contributions to plan assets of \$3 million in both 2016 and 2015. Total company contributions in 2017 are expected to be approximately \$97 million, which are primarily direct benefit payments for unfunded plans. The company has no significant required contributions to U.S. pension plan assets in 2017 under applicable funding regulations. See the discussion in "Critical Accounting Policies" for more information about postretirement benefit obligations.

#### **BUSINESS SEGMENT AND GEOGRAPHIC AREA RESULTS**

The following discussion relates to operating results by reportable segment and geographic area. Operating profit is income before certain external interest expense, certain foreign exchange gains or losses, income taxes and corporate expenses. However, operating profit of the financial services segment includes the effect of interest expense and foreign currency exchange gains or losses.

#### **Worldwide Agriculture and Turf Operations**

The agriculture and turf segment had an operating profit of \$1,700 million for the year, compared with \$1,649 million in 2015. Net sales decreased 7 percent in 2016 due to lower shipment volumes and the unfavorable effects of currency translation, partially offset by price realization. Operating profit was higher primarily due to price realization, lower production costs, lower selling, administrative and general expenses and a gain on the sale of a partial interest in SiteOne (see Note 5), partially offset by lower shipment volumes, unfavorable effects of foreign currency exchange and a less favorable product mix.

#### **Worldwide Construction and Forestry Operations**

The construction and forestry segment had an operating profit of \$180 million in 2016, compared with \$528 million in 2015. Net sales decreased 18 percent for the year largely as a result of lower shipment volumes and higher sales incentive costs. Operating profit declined primarily due to lower shipment volumes and higher sales incentive costs, partially offset by a

reduction in both selling, administrative and general expenses and production costs.

#### **Worldwide Financial Services Operations**

The operating profit of the financial services segment was \$709 million in 2016, compared with \$963 million in 2015. The decline was primarily due to less favorable financing spreads, higher losses on lease residual values and a higher provision for credit losses. Additionally, full year results in 2015 benefited from a gain on the sale of the crop insurance business (see Note 4). Total revenues of the financial services operations, including intercompany revenues, increased 4 percent in 2016. The average balance of receivables and leases financed was 1 percent lower in 2016, compared with 2015. Interest expense increased 18 percent in 2016 as a result of higher average borrowing rates, partially offset by lower average borrowings. The financial services operations' ratio of earnings to fixed charges was 2.35 to 1 in 2016, compared with 3.29 to 1 in 2015.

#### Equipment Operations in U.S. and Canada

The equipment operations in the U.S. and Canada had an operating profit of \$1,305 million in 2016, compared with \$1,643 million in 2015. The decline was due primarily to lower shipment volumes, the unfavorable effects of foreign currency exchange and the impact of a less favorable product mix. The decline was partially offset by price realization, lower production costs, lower selling, administrative and general expenses and a gain on the sale of a partial interest in SiteOne (see Note 5). Net sales decreased 13 percent due primarily to lower shipment volumes partially offset by price realization. The physical volume of sales decreased 14 percent, compared with 2015.

#### **Equipment Operations outside U.S. and Canada**

The equipment operations outside the U.S. and Canada had an operating profit of \$575 million in 2016, compared with \$534 million in 2015. The increase was due primarily to price realization, lower production costs and lower selling, administrative and general expenses, partially offset by the unfavorable effects of foreign currency exchange, the impact of a less favorable product mix and lower shipment volumes. Net sales were 3 percent lower primarily reflecting the unfavorable effects of foreign currency translation and decreased shipment volumes, partially offset by price realization. The physical volume of sales decreased 2 percent, compared with 2015.

#### MARKET CONDITIONS AND OUTLOOK

Company equipment sales are projected to decrease 1 percent for fiscal year 2017 and decrease about 4 percent for the first quarter, compared with the same periods in 2016. Included in the forecast is a positive foreign currency translation effect of about 1 percent for the year and about 2 percent for the quarter. For fiscal year 2017, net income attributable to Deere & Company is anticipated to be about \$1.4 billion. In fiscal December 2016, the company sold a portion of its interest in SiteOne (see Note 30) resulting in a gain of \$105 million pretax or \$66 million after-tax. This gain is not included in the fiscal year 2017 net income forecast above.

During the fourth quarter of 2016, the company announced voluntary employee separation programs as part of its effort to reduce operating costs. The expense of these programs is recorded in the period in which employees accept their separation offer. Total pretax expenses related to the programs are estimated to be \$111 million, of which \$11 million was

recorded in the fourth quarter of 2016, and \$100 million will be recorded primarily in the first quarter of 2017. Savings from the separation programs are expected to be approximately \$70 million in 2017.

Agriculture and Turf. The company's worldwide sales of agriculture and turf equipment are forecast to decrease by about 1 percent for fiscal year 2017, including a positive currency translation effect of about 1 percent. Industry sales for agricultural equipment in the U.S. and Canada are forecast to be down 5 to 10 percent for 2017. The decline, which reflects the continuing impact of low commodity prices and weak farm incomes, is expected to be felt in the sale of both large and small models of equipment. Full year 2017 industry sales in the EU28 member nations are forecast to decline about 5 percent, with the decline attributable to low commodity prices and farm incomes. South American industry sales of tractors and combines are projected to increase about 15 percent as a result of improving economic and political conditions in Brazil and Argentina. Asian sales are projected to be about the same to up slightly, benefiting from higher sales in India. Industry sales of turf and utility equipment in the U.S. and Canada are expected to be about the same for 2017, with company sales outpacing the industry.

Construction and Forestry. The company's worldwide sales of construction and forestry equipment are forecast to increase about 1 percent for 2017, including a positive currency translation effect of about 1 percent. The forecast reflects the impact of generally slow economic growth worldwide. In forestry, global industry sales are expected to be about the same as in 2016 with some moderation in the North American market.

**Financial Services.** Fiscal year 2017 net income attributable to Deere & Company for the financial services operations is expected to be approximately \$480 million. The outlook reflects lower losses on lease residual values, partially offset by less favorable financing spreads and an increased provision for credit losses.

#### SAFE HARBOR STATEMENT

Safe Harbor Statement under the Private Securities Litigation Reform Act of 1995: Statements under "Overview," "Market Conditions and Outlook," and other forward-looking statements herein that relate to future events, expectations, and trends involve factors that are subject to change, and risks and uncertainties that could cause actual results to differ materially. Some of these risks and uncertainties could affect particular lines of business, while others could affect all of the company's businesses.

The company's agricultural equipment business is subject to a number of uncertainties including the factors that affect farmers' confidence and financial condition. These factors include demand for agricultural products, world grain stocks, weather conditions, soil conditions, harvest yields, prices for commodities and livestock, crop and livestock production expenses, availability of transport for crops, the growth and sustainability of non-food uses for some crops (including ethanol and biodiesel production), real estate values, available acreage for farming, the land ownership policies of governments, changes in government farm programs and policies, international reaction to such programs, changes in environmental regulations and their impact on farming practices; changes in and effects of crop insurance programs, global trade agreements, animal

diseases and their effects on poultry, beef and pork consumption and prices, crop pests and diseases, and the level of farm product exports (including concerns about genetically modified organisms).

Factors affecting the outlook for the company's turf and utility equipment include consumer confidence, weather conditions, customer profitability, consumer borrowing patterns, consumer purchasing preferences, housing starts, infrastructure investment, spending by municipalities and golf courses, and consumable input costs.

Consumer spending patterns, real estate and housing prices, the number of housing starts, interest rates and the levels of public and non-residential construction are important to sales and results of the company's construction and forestry equipment. Prices for pulp, paper, lumber and structural panels are important to sales of forestry equipment.

All of the company's businesses and its results are affected by general economic conditions in the global markets and industries in which the company operates; customer confidence in general economic conditions; government spending and taxing; foreign currency exchange rates and their volatility, especially fluctuations in the value of the U.S. dollar; interest rates; inflation and deflation rates; changes in weather patterns; the political and social stability of the global markets in which the company operates; the effects of, or response to, terrorism and security threats; wars and other conflicts; natural disasters; and the spread of major epidemics.

Significant changes in market liquidity conditions, changes in the company's credit ratings and any failure to comply with financial covenants in credit agreements could impact access to funding and funding costs, which could reduce the company's earnings and cash flows. Financial market conditions could also negatively impact customer access to capital for purchases of the company's products and customer confidence and purchase decisions, borrowing and repayment practices, and the number and size of customer loan delinquencies and defaults. A debt crisis, in Europe or elsewhere, could negatively impact currencies, global financial markets, social and political stability, funding sources and costs, asset and obligation values, customers, suppliers, demand for equipment, and company operations and results. The company's investment management activities could be impaired by changes in the equity, bond and other financial markets, which would negatively affect earnings.

The potential withdrawal of the United Kingdom from the European Union and the perceptions as to the impact of the withdrawal may adversely affect business activity, political stability and economic conditions in the United Kingdom, the European Union and elsewhere. The economic conditions and outlook could be further adversely affected by (i) the uncertainty concerning the timing and terms of the exit, (ii) new or modified trading arrangements between the United Kingdom and other countries, (iii) the risk that one or more other European Union countries could come under increasing pressure to leave the European Union, or (iv) the risk that the euro as the single currency of the Eurozone could cease to exist. Any of these developments, or the perception that any of these developments are likely to occur, could affect economic growth or business activity in the United Kingdom or the European Union, and could result in the relocation of businesses, cause business interruptions, lead to economic recession or depression, and

impact the stability of the financial markets, availability of credit, currency exchange rates, interest rates, financial institutions, and political, financial and monetary systems. Any of these developments could affect our businesses, liquidity, results of operations and financial position.

Additional factors that could materially affect the company's operations, access to capital, expenses and results include changes in, uncertainty surrounding and the impact of governmental trade, banking, monetary and fiscal policies, including financial regulatory reform and its effects on the consumer finance industry, derivatives, funding costs and other areas, and governmental programs, policies, tariffs and sanctions in particular jurisdictions or for the benefit of certain industries or sectors; actions by central banks; actions by financial and securities regulators; actions by environmental, health and safety regulatory agencies, including those related to engine emissions, carbon and other greenhouse gas emissions, noise and the effects of climate change; changes to GPS radio frequency bands or their permitted uses; changes in labor regulations; changes to accounting standards; changes in tax rates, estimates, and regulations and company actions related thereto; compliance with U.S. and foreign laws when expanding to new markets and otherwise; and actions by other regulatory bodies.

Other factors that could materially affect results include production, design and technological innovations and difficulties, including capacity and supply constraints and prices; the availability and prices of strategically sourced materials, components and whole goods; delays or disruptions in the company's supply chain or the loss of liquidity by suppliers; disruptions of infrastructures that support communications, operations or distribution; the failure of suppliers to comply with laws, regulations and company policy pertaining to employment, human rights, health, safety, the environment and other ethical business practices; events that damage the company's reputation or brand; significant investigations, claims, lawsuits or other legal proceedings; start-up of new plants and products; the success of new product initiatives; changes in customer product preferences and sales mix; gaps or limitations in rural broadband coverage, capacity and speed needed to support technology solutions; oil and energy prices, supplies and volatility: the availability and cost of freight: actions of competitors in the various industries in which the company competes, particularly price discounting; dealer practices especially as to levels of new and used field inventories; changes in demand and pricing for used equipment; labor relations and contracts; acquisitions and divestitures of businesses; the integration of new businesses; the implementation of organizational changes; difficulties related to the conversion and implementation of enterprise resource planning systems; security breaches and other disruptions to the company's and suppliers' information technology infrastructure; changes in company declared dividends and common stock issuances and repurchases; changes in the level and funding of employee retirement benefits; changes in market values of investment assets, compensation, retirement, discount and mortality rates which impact retirement benefit costs; and significant changes in health care costs.

The liquidity and ongoing profitability of John Deere Capital Corporation and other credit subsidiaries depend largely on timely access to capital in order to meet future cash flow requirements, and to fund operations, costs and purchases of the company's products. If general economic conditions deteriorate or capital markets become more volatile, funding could be unavailable or insufficient. Additionally, customer confidence levels may result in declines in credit applications and increases in delinquencies and default rates, which could materially impact write-offs and provisions for credit losses.

The company's outlook is based upon assumptions relating to the factors described above, which are sometimes based upon estimates and data prepared by government agencies. Such estimates and data are often revised. The company, except as required by law, undertakes no obligation to update or revise its outlook, whether as a result of new developments or otherwise.

#### 2015 COMPARED WITH 2014

#### **CONSOLIDATED RESULTS**

Worldwide net income attributable to Deere & Company in 2015 was \$1,940 million, or \$5.77 per share diluted (\$5.81 basic), compared with \$3,162 million, or \$8.63 per share diluted (\$8.71 basic), in 2014. Net sales and revenues decreased 20 percent to \$28,863 million in 2015, compared with \$36,067 million in 2014. Net sales of the worldwide equipment operations declined 22 percent in 2015 to \$25,775 million from \$32,961 million in 2014. 2015 sales included price realization of 1 percent and an unfavorable currency translation effect of 5 percent. Equipment net sales in the United States and Canada decreased 18 percent in 2015. Outside the U.S. and Canada, net sales decreased 28 percent in 2015, with an unfavorable currency translation effect of 10 percent.

Worldwide equipment operations had an operating profit of \$2,177 million in 2015, compared with \$4,297 million in 2014. The operating profit decline was due primarily to lower shipment volumes, the impact of a less favorable product mix and the unfavorable effects of foreign currency exchange. These factors were partially offset by price realization, lower selling, administrative and general expenses and lower production costs.

Net income of the company's equipment operations was \$1,308 million for 2015, compared with \$2,548 million in 2014. In addition to the operating factors mentioned above, a lower effective tax rate benefited the results. The lower rate resulted mainly from a reduction of a valuation allowance recorded during the fourth quarter of 2015 due to a change in the expected realizable value of a deferred tax asset.

Net income of the financial services operations attributable to Deere & Company in 2015 increased to \$633 million, compared with \$624 million in 2014. Results improved due to growth in the average credit portfolio, the previously announced crop insurance sale and higher crop insurance margins experienced prior to divestiture (see Note 4), and lower selling, administrative and general expenses. These factors were partially offset by the unfavorable effects of foreign currency exchange translation, less favorable financing spreads and higher losses on residual values primarily for construction equipment operating leases. The results in 2014 also benefited from a more favorable effective tax rate. Additional information is presented in the

following discussion of the "Worldwide Financial Services Operations."

The cost of sales to net sales ratio for 2015 was 78.1 percent, compared with 75.2 percent in 2014. The increase was due primarily to the impact of a less favorable product mix and the unfavorable effects of foreign currency exchange, partially offset by price realization and lower production costs.

Finance and interest income increased in 2015 due to a larger average credit portfolio, partially offset by lower average financing rates and the unfavorable effects of currency translation. Other income decreased due primarily to a reduction in crop insurance premiums as a result of the sale of the Crop Insurance operations (see Note 4), partially offset by the gain on the sale of the Crop Insurance operations and higher extended warranty revenue. Research and development costs decreased largely due to the effect of currency translation. Selling. administrative and general expenses decreased mainly due to the effect of currency translation, lower incentive compensation and dealer commission expenses, the sale of the Water and Crop Insurance operations, and the deconsolidation of Landscapes (see Note 4). Interest expense increased due to higher average interest rates and higher average borrowings, partially offset by the favorable effects of currency translation. Other operating expenses decreased primarily due to a reduction in crop insurance claims, the Water operations' impairment and sale in 2014 (see Note 4), the effect of currency translation, partially offset by higher depreciation of equipment on operating leases.

The company has several defined benefit pension plans and defined benefit health care and life insurance plans. The company's postretirement benefit costs for these plans in 2015 were \$512 million, compared with \$432 million in 2014. The long-term expected return on plan assets, which is reflected in these costs, was an expected gain of 7.3 percent in 2015 and 7.5 percent in 2014, or \$824 million in 2015 and \$848 million in 2014. The actual return was a gain of \$606 million in 2015 and \$1,213 million in 2014. Total company contributions to the plans were \$131 million in 2015 and \$138 million in 2014, which include direct benefit payments for unfunded plans. These contributions also included voluntary contributions to plan assets of \$3 million in 2015 and \$5 million in 2014.

#### **BUSINESS SEGMENT AND GEOGRAPHIC AREA RESULTS**

#### **Worldwide Agriculture and Turf Operations**

The agriculture and turf segment had an operating profit of \$1,649 million in 2015, compared with \$3,649 million in 2014. Net sales decreased 25 percent in 2015 due largely to lower shipment volumes and the unfavorable effects of currency translation. These factors were partially offset by price realization. Lower operating profit was driven primarily by the impact of lower shipment volumes, a less favorable product mix and the unfavorable effects of foreign currency exchange, partially offset by price realization, lower selling, administrative and general expenses, and lower production costs.

#### **Worldwide Construction and Forestry Operations**

The construction and forestry segment had an operating profit of \$528 million in 2015, compared with \$648 million in 2014. Net sales decreased 9 percent in 2015 mainly as a result of lower shipment volumes and the unfavorable effect of currency translation, partially offset by price realization. Operating profit declined mainly due to lower shipment volumes, the unfavorable

effects of foreign exchange and higher production costs, partially offset by price realization and lower selling, administrative and general expenses.

#### **Worldwide Financial Services Operations**

The operating profit of the financial services segment was \$963 million in 2015, compared with \$921 million in 2014. The results improved due to growth in the average credit portfolio, the previously announced Crop Insurance operations sale (see Note 4) and higher crop insurance margins experienced prior to the divestiture, and lower selling, administrative and general expenses. These factors were partially offset by the unfavorable effects of foreign currency exchange translation, less favorable financing spreads and higher losses on residual values primarily for construction equipment operating leases. Total revenues of the financial services operations, including intercompany revenues, were approximately the same in 2015, compared with 2014. The average balance of receivables and leases financed was 1 percent higher in 2015, compared with 2014. Interest expense increased 6 percent in 2015 as a result of higher average borrowings and higher average interest rates. The financial services operations' ratio of earnings to fixed charges was 3.29 to 1 in 2015, compared with 3.37 to 1 in 2014.

#### **Equipment Operations in U.S. and Canada**

The equipment operations in the U.S. and Canada had an operating profit of \$1,643 million in 2015, compared with \$3,311 million in 2014. The decline was due primarily to lower shipment volumes and the impact of a less favorable product mix. The decline was partially offset by price realization. Net sales decreased 18 percent due primarily to lower shipment volumes and the unfavorable effects of currency translation, partially offset by price realization. The physical volume of sales decreased 18 percent, compared with 2014.

#### Equipment Operations outside U.S. and Canada

The equipment operations outside the U.S. and Canada had an operating profit of \$534 million in 2015, compared with \$986 million in 2014. The decrease was due primarily to lower shipment volumes, the impact of a less favorable product mix and the unfavorable effects of foreign currency exchange. These factors were partially offset by price realization. Net sales were 28 percent lower primarily reflecting decreased shipment volumes and the unfavorable effects of foreign currency translation, partially offset by price realization. The physical volume of sales decreased 19 percent, compared with 2014.

#### CAPITAL RESOURCES AND LIQUIDITY

The discussion of capital resources and liquidity has been organized to review separately, where appropriate, the company's consolidated totals, equipment operations and financial services operations.

#### CONSOLIDATED

Positive cash flows from consolidated operating activities in 2016 were \$3,764 million. This resulted primarily from net income adjusted for non-cash provisions, a decrease in receivables related to sales and a change in net retirement benefits, which were partially offset by a decrease in accounts payable and accrued expenses, and an increase in inventories primarily related to equipment transferred to operating leases (see Note 6). Cash outflows from investing activities were \$1,177 million in 2016, due primarily to purchases of property and equipment of \$644 million, the cost of receivables

(excluding receivables related to sales) and cost of equipment on operating leases exceeding the collections of receivables and the proceeds from sales of equipment on operating leases by \$398 million and acquisitions of businesses, net of cash acquired, of \$199 million, partially offset by proceeds from sales of businesses and unconsolidated affiliates, net of cash sold, of \$81 million. Cash outflows from financing activities were \$2,401 million in 2016 due primarily to a decrease in borrowings of \$1,411 million, dividends paid of \$761 million and repurchases of common stock of \$205 million. Cash and cash equivalents increased \$174 million during 2016.

Over the last three years, operating activities have provided an aggregate of \$11,031 million in cash. In addition, increases in borrowings were \$3,051 million, proceeds from maturities and sales exceeded purchases of marketable securities by \$1,112 million, proceeds from sales of businesses and unconsolidated affiliates were \$576 million and proceeds from issuance of common stock (resulting from the exercise of stock options) were \$358 million. The aggregate amount of these cash flows was used mainly to repurchase common stock of \$5,707 million, acquire receivables (excluding receivables related to sales) and equipment on operating leases that exceeded collections of receivables and the proceeds from sales of equipment on operating leases by \$3,998 million, purchase property and equipment of \$2,387 million, pay dividends of \$2,364 million and acquire businesses of \$199 million. Cash and cash equivalents increased \$832 million over the three-year period.

The company has access to most global markets at reasonable costs and expects to have sufficient sources of global funding and liquidity to meet its funding needs. The company's exposures to receivables from customers in European countries experiencing economic strains are not significant. Sources of liquidity for the company include cash and cash equivalents, marketable securities, funds from operations, the issuance of commercial paper and term debt, the securitization of retail notes (both public and private markets) and committed and uncommitted bank lines of credit. The company's commercial paper outstanding at October 31, 2016 and 2015 was \$1,253 million and \$2,968 million, respectively, while the total cash and cash equivalents and marketable securities position was \$4,789 million and \$4,600 million, respectively. The amount of the total cash and cash equivalents and marketable securities held by foreign subsidiaries, in which earnings are considered indefinitely reinvested, was \$2,301 million and \$1,588 million at October 31, 2016 and 2015, respectively.

Lines of Credit. The company also has access to bank lines of credit with various banks throughout the world. Worldwide lines of credit totaled \$7,315 million at October 31, 2016, \$5,747 million of which were unused. For the purpose of computing unused credit lines, commercial paper and short-term bank borrowings, excluding secured borrowings and the current portion of long-term borrowings, were primarily considered to constitute utilization. Included in the total credit lines at October 31, 2016 were long-term credit facility agreements of \$2,900 million, expiring in April 2020, and \$2,900 million, expiring in April 2021. These credit agreements require John Deere Capital Corporation (Capital Corporation) to maintain its consolidated ratio of earnings to fixed charges at not less than 1.05 to 1 for each fiscal quarter and the ratio of senior debt,

excluding securitization indebtedness, to capital base (total subordinated debt and stockholder's equity excluding accumulated other comprehensive income (loss)) at not more than 11 to 1 at the end of any fiscal quarter. The credit agreements also require the equipment operations to maintain a ratio of total debt to total capital (total debt and stockholders' equity excluding accumulated other comprehensive income (loss)) of 65 percent or less at the end of each fiscal quarter. Under this provision, the company's excess equity capacity and retained earnings balance free of restriction at October 31, 2016 was \$9,553 million. Alternatively under this provision, the equipment operations had the capacity to incur additional debt of \$17,742 million at October 31, 2016. All of these requirements of the credit agreements have been met during the periods included in the consolidated financial statements.

Debt Ratings. To access public debt capital markets, the company relies on credit rating agencies to assign short-term and long-term credit ratings to the company's securities as an indicator of credit quality for fixed income investors. A security rating is not a recommendation by the rating agency to buy, sell or hold company securities. A credit rating agency may change or withdraw company ratings based on its assessment of the company's current and future ability to meet interest and principal repayment obligations. Each agency's rating should be evaluated independently of any other rating. Lower credit ratings generally result in higher borrowing costs, including costs of derivative transactions, and reduced access to debt capital markets

The senior long-term and short-term debt ratings and outlook currently assigned to unsecured company securities by the rating agencies engaged by the company are as follows:

	Senior Long-Term	Short-Term	Outlook
Fitch Ratings	Α	F1	Stable
Moody's Investors Service, Inc.	A2	Prime-1	Negative
Standard & Poor's	Α	A-1	Stable

Trade accounts and notes receivable primarily arise from sales of goods to independent dealers. Trade receivables decreased by \$40 million in 2016 due primarily to lower shipment volumes in the U.S. and Canada, partially offset by higher fourth quarter agriculture and turf shipment volumes outside the U.S. and Canada. The ratio of trade accounts and notes receivable at October 31 to fiscal year net sales was 13 percent in 2016 and 12 percent in 2015. Total worldwide agriculture and turf receivables increased \$160 million and construction and forestry receivables decreased \$200 million. The collection period for trade receivables averages less than 12 months. The percentage of trade receivables outstanding for a period exceeding 12 months was 2 percent at October 31, 2016 and 1 percent at October 31, 2015.

Deere & Company's stockholders' equity was \$6,520 million at October 31, 2016, compared with \$6,743 million at October 31, 2015. The decrease of \$223 million resulted from a change in the retirement benefits adjustment of \$908 million, dividends declared of \$757 million and an increase in treasury stock of \$180 million, which were partially offset by net income attributable to Deere & Company of \$1,524 million and an increase in common stock of \$86 million.

#### **EQUIPMENT OPERATIONS**

The company's equipment businesses are capital intensive and are subject to seasonal variations in financing requirements for inventories and certain receivables from dealers. The equipment operations sell a significant portion of their trade receivables to financial services. To the extent necessary, funds provided from operations are supplemented by external financing sources.

Cash provided by operating activities of the equipment operations during 2016, including intercompany cash flows, was \$2,906 million due primarily to net income adjusted for non-cash provisions, a decrease in inventories and a change in net retirement benefits, partially offset by an increase in trade receivables and a decrease in accounts payable and accrued expenses.

Over the last three years, these operating activities, including intercompany cash flows, have provided an aggregate of \$10,494 million in cash.

Trade receivables held by the equipment operations increased by \$169 million during 2016. The equipment operations sell a significant portion of their trade receivables to financial services (see previous consolidated discussion).

Inventories decreased by \$477 million in 2016 due primarily to lower production volumes, partially offset by acquisitions (see Note 4) and currency translation. Most of these inventories are valued on the last-in, first-out (LIFO) method. The ratios of inventories on a first-in, first-out (FIFO) basis (see Note 15), which approximates current cost, to fiscal year cost of sales were 26 percent at both October 31, 2016 and 2015.

Total interest-bearing debt of the equipment operations was \$4,835 million at the end of 2016, compared with \$4,925 million at the end of 2015 and \$5,077 million at the end of 2014. The ratio of total debt to total capital (total interest-bearing debt and stockholders' equity) at the end of 2016, 2015 and 2014 was 43 percent, 42 percent and 36 percent, respectively.

Property and equipment cash expenditures for the equipment operations in 2016 were \$642 million, compared with \$688 million in 2015. Capital expenditures in 2017 are estimated to be \$600 million.

In November 2015, the company announced the signing of a definitive purchase agreement to acquire Precision Planting LLC., a developer and distributor of retrofit components for precision agriculture applications. The estimated purchase price, net of cash acquired, is \$190 million. In August 2016, the U.S. Department of Justice filed a lawsuit to block the acquisition, which the company plans to contest. As a result of this development, the closing date for this transaction is uncertain.

#### **FINANCIAL SERVICES**

The financial services operations rely on their ability to raise substantial amounts of funds to finance their receivable and lease portfolios. Their primary sources of funds for this purpose are a combination of commercial paper, term debt, securitization of retail notes, equity capital and borrowings from Deere & Company.

The cash provided by operating activities was used for financing and investing activities. Cash flows from the financial services' operating activities, including intercompany cash flows, were \$1,861 million in 2016. Cash used by investing activities totaled \$826 million in 2016 due primarily to the cost of receivables

(excluding trade and wholesale) and cost of equipment on operating leases exceeding collections of these receivables and the proceeds from sales of equipment on operating leases by \$1,316 million, partially offset by a decrease in trade receivables and wholesale notes of \$493 million. Cash used for financing activities totaled \$1,110 million in 2016, representing primarily a decrease in external borrowings of \$1,304 million and dividends paid of \$562 million to Deere & Company, partially offset by an increase in borrowings from Deere & Company of \$756 million. Cash and cash equivalents decreased \$67 million.

Over the last three years, the operating activities, including intercompany cash flows, have provided \$4,764 million in cash. In addition, an increase in total borrowings of \$4,173 million, a decrease in trade receivables and wholesale notes of \$368 million, proceeds from sales of businesses, net of cash sold, of \$149 million and a capital investment from Deere & Company of \$122 million provided cash inflows. These amounts have been used mainly to fund receivables (excluding trade and wholesale) and equipment on operating lease acquisitions, which exceeded collections and the proceeds from sales of equipment on operating leases by \$7,208 million, pay dividends to Deere & Company of \$1,392 million and purchase marketable securities that exceeded proceeds from maturities and sales by \$47 million. Cash and cash equivalents increased \$715 million over the three-year period.

Receivables and equipment on operating leases decreased by \$66 million in 2016, compared with 2015. Total acquisition volumes of receivables (excluding trade and wholesale notes) and cost of equipment on operating leases decreased 5 percent in 2016, compared with 2015. The volumes of retail notes and financing leases decreased approximately 13 percent and 3 percent, respectively, while operating lease and revolving charge accounts volumes increased 7 percent and 3 percent, respectively. During 2016, the amount of trade receivables and wholesale notes decreased 7 percent and 5 percent, respectively. At October 31, 2016 and 2015, net receivables and leases administered, which include receivables administered but not owned, were \$38,116 million and \$38,188 million, respectively.

Total external interest-bearing debt of the financial services operations was \$30,839 million at the end of 2016, compared with \$31,925 million at the end of 2015 and \$31,882 million at the end of 2014. Total external borrowings have changed generally corresponding with the level of the receivable and lease portfolio, the level of cash and cash equivalents, the change in payables owed to Deere & Company and the change in investment from Deere & Company. The financial services operations' ratio of total interest-bearing debt to total stockholder's equity was 7.6 to 1 at the end of 2016, 7.6 to 1 at the end of 2015 and 7.4 to 1 at the end of 2014.

The Capital Corporation has a revolving credit agreement to utilize bank conduit facilities to securitize retail notes (see Note 13). At October 31, 2016, the facility had a total capacity, or "financing limit," of up to \$3,880 million of secured financings at any time. The facility was renewed in November 2016 with a capacity of \$3,500 million. After a two-year revolving period, unless the banks and Capital Corporation agree to renew, Capital Corporation would liquidate the secured borrowings over time as payments on the retail notes are collected. At October 31, 2016, \$2,344 million of short-term securitization borrowings was outstanding under the agreement.

During 2016, the financial services operations issued \$3,187 million and retired \$2,774 million of retail note securitization borrowings. During 2016, the financial services operations also issued \$4,897 million and retired \$5,195 million of long-term borrowings, which were primarily medium-term notes.

#### **OFF-BALANCE-SHEET ARRANGEMENTS**

At October 31, 2016, the company had approximately \$152 million of guarantees issued primarily to banks outside the U.S. related to third-party receivables for the retail financing of John Deere equipment. The company may recover a portion of any required payments incurred under these agreements from repossession of the equipment collateralizing the receivables. The maximum remaining term of the receivables guaranteed at October 31, 2016 was approximately four years.

#### AGGREGATE CONTRACTUAL OBLIGATIONS

The payment schedule for the company's contractual obligations at October 31, 2016 in millions of dollars is as follows:

	Total	Less than	2&3	4&5	More than
On-balance-sheet	Total	1 year	years	years	5 years
Debt*					
Equipment operations	\$ 4,848	\$ 249	\$ 955	\$ 32	\$3,612
Financial services**	30,597	9,389	12,318	5,253	3,637
Total	35,445	9,638	13,273	5,285	7,249
Interest relating to debt***	4,384	719	1,026	659	1,980
Accounts payable	2,478	2,339	104	32	3
Capital leases	34	18	11	4	1
Off-balance-sheet					
Purchase obligations	1,969	1,902	21	20	26
Operating leases	392	101	137	86	68
Total	\$44,702	\$14,717	\$14,572	\$6,086	\$9,327

- \* Principal payments.
- Securitization borrowings of \$5,003 million classified as short-term on the balance sheet related to the securitization of retail notes are included in this table based on the expected payment schedule (see Note 18).
- \*\*\* Includes projected payments related to interest rate swaps

The previous table does not include unrecognized tax benefit liabilities of approximately \$198 million at October 31, 2016, since the timing of future payments is not reasonably estimable at this time (see Note 8). For additional information regarding pension and other postretirement employee benefit obligations, short-term borrowings, long-term borrowings and lease obligations, see Notes 7, 18, 20 and 21, respectively.

#### **CRITICAL ACCOUNTING POLICIES**

The preparation of the company's consolidated financial statements in conformity with accounting principles generally accepted in the U.S. requires management to make estimates and assumptions that affect reported amounts of assets, liabilities, revenues and expenses. Changes in these estimates and assumptions could have a significant effect on the financial statements. The accounting policies below are those management believes are the most critical to the preparation of the company's financial statements and require the most difficult, subjective or complex judgments. The company's other accounting policies are described in the Notes to the Consolidated Financial Statements

#### **Sales Incentives**

At the time a sale to a dealer is recognized, the company records an estimate of the future sales incentive costs for allowances and financing programs that will be due when the dealer sells the equipment to a retail customer. The estimate is based on historical data, announced incentive programs, field inventory levels and retail sales volumes. The final cost of these programs and the amount of accrual required for a specific sale are fully determined when the dealer sells the equipment to the retail customer. This is due to numerous programs available at any particular time and new programs that may be announced after the company records the sale. Changes in the mix and types of programs affect these estimates, which are reviewed quarterly.

The sales incentive accruals at October 31, 2016, 2015 and 2014 were \$1,391 million, \$1,463 million and \$1,573 million, respectively. The decreases in 2016 and 2015 were due primarily to lower sales volumes.

The estimation of the sales incentive accrual is impacted by many assumptions. One of the key assumptions is the historical percent of sales incentive costs to retail sales from dealers. Over the last five fiscal years, this percent has varied by an average of approximately plus or minus 1.3 percent, compared to the average sales incentive costs to retail sales percent during that period. Holding other assumptions constant, if this estimated cost experience percent were to increase or decrease 1.3 percent, the sales incentive accrual at October 31, 2016 would increase or decrease by approximately \$86 million.

#### **Product Warranties**

At the time a sale to a dealer is recognized, the company records the estimated future warranty costs. The company generally determines its total warranty liability by applying historical claims rate experience to the estimated amount of equipment that has been sold and is still under warranty based on dealer inventories and retail sales. The historical claims rate is primarily determined by a review of five-year claims costs and consideration of current quality developments. Variances in claims experience and the type of warranty programs affect these estimates, which are reviewed quarterly.

The product warranty accruals, excluding extended warranty unamortized premiums, at October 31, 2016, 2015 and 2014 were \$779 million, \$807 million and \$809 million, respectively. The changes were due primarily to lower sales volumes in 2016 and 2015.

Estimates used to determine the product warranty accruals are significantly affected by the historical percent of warranty claims costs to sales. Over the last five fiscal years, this percent has varied by an average of approximately plus or minus .13 percent, compared to the average warranty costs to sales percent during that period. Holding other assumptions constant, if this estimated cost experience percent were to increase or decrease .13 percent, the warranty accrual at October 31, 2016 would increase or decrease by approximately \$35 million.

#### Postretirement Benefit Obligations

Pension obligations and other postretirement employee benefit (OPEB) obligations are based on various assumptions used by the company's actuaries in calculating these amounts. These assumptions include discount rates, health care cost trend rates, expected return on plan assets, compensation increases, retirement rates, mortality rates and other factors. Actual results

that differ from the assumptions and changes in assumptions affect future expenses and obligations.

The pension liabilities, net of pension assets, recognized on the balance sheet at October 31, 2016, 2015 and 2014 were \$1,949 million, \$1,022 million and \$743 million, respectively. The increase in pension net liabilities in 2016 was due primarily to decreases in discount rates. The increase in pension net liabilities in 2015 was due primarily to interest on the liabilities and updated mortality assumptions based on the Society of Actuaries' RP-2015 base table and MP 2015 projection scale, partially offset by return on plan assets. The OPEB liabilities, net of OPEB assets, at October 31, 2016, 2015 and 2014 were \$6,065 million, \$5,395 million and \$5,347 million, respectively. The increase in OPEB net liabilities in 2016 was due primarily to decreases in discount rates and interest on the liabilities. The increase in OPEB net liabilities in 2015 was due primarily to interest on the liabilities and a change in the health care cost trend, primarily related to higher prescription drug costs, partially offset by the transition to a Medicare Advantage plan for certain retirees (see Note 7).

In 2016, the company changed the method used to estimate the service and interest cost components of the net periodic pension and postretirement benefits cost. The new method uses the spot yield curve approach to estimate the service and interest cost by applying the specific spot rates along the yield curve used to determine the benefit plan obligations to relevant projected cash outflows. Prior to 2016, the service and interest cost components were determined using a single weighted-average discount rate. The change does not affect the measurement of the total benefit plan obligations as the change in service and interest cost offsets in the actuarial gains and losses recorded in other comprehensive income.

The company changed to the new method to provide a more precise measure of service and interest cost by improving the correlation between the projected benefit cash flows and the discrete spot yield curve rates. The company accounted for this change as a change in estimate prospectively beginning in 2016.

The effect of hypothetical changes to selected assumptions on the company's major U.S. retirement benefit plans would be as follows in millions of dollars:

		October 31, 2016	2017
		Increase	Increase
	Percentage	(Decrease)	(Decrease)
Assumptions	Change	PBO/APBO*	Expense
Pension			-
Discount rate**	+/5	\$ (698)/789	\$ (32)/36
Expected return on			
assets	+/5		(49)/49
OPEB			
Discount rate**	+/5	(379)/420	(14)/15
Expected return on			
assets	+/5		(1)/1
Health care cost			
trend rate**	+/-1.0	854/(656)	98/(76)
		, ,	` '

- \* Projected benefit obligation (PBO) for pension plans and accumulated postretirement benefit obligation (APBO) for OPEB plans.
- \*\* Pretax impact on service cost, interest cost and amortization of gains or losses.

#### Goodwill

Goodwill is not amortized and is tested for impairment annually and when events or circumstances change such that it is more

likely than not that the fair value of a reporting unit is reduced below its carrying amount. The end of the fiscal third quarter is the annual measurement date. To test for goodwill impairment, the carrying value of each reporting unit is compared with its fair value. If the carrying value of the goodwill is considered impaired, a loss is recognized based on the amount by which the carrying value exceeds the implied fair value of the goodwill.

An estimate of the fair value of the reporting unit is determined through a combination of comparable market values for similar businesses and discounted cash flows. These estimates can change significantly based on such factors as the reporting unit's financial performance, economic conditions, interest rates, growth rates, pricing, changes in business strategies and competition.

Based on this testing, the company has not identified a reporting unit for which the goodwill was impaired in 2016, 2015 or 2014. A 10 percent decrease in the estimated fair value of the company's reporting units would have had no impact on the carrying value of goodwill at the annual measurement date in 2016.

#### **Allowance for Credit Losses**

The allowance for credit losses represents an estimate of the losses inherent in the company's receivable portfolio. The level of the allowance is based on many quantitative and qualitative factors, including historical loss experience by product category, portfolio duration, delinquency trends, economic conditions and credit risk quality. The adequacy of the allowance is assessed quarterly. Different assumptions or changes in economic conditions would result in changes to the allowance for credit losses and the provision for credit losses.

The total allowance for credit losses at October 31, 2016, 2015 and 2014 was \$226 million, \$198 million and \$230 million, respectively. The allowance increased in 2016 compared to 2015 due to higher write-offs, and decreased in 2015 compared to 2014, due primarily to foreign currency translation.

The assumptions used in evaluating the company's exposure to credit losses involve estimates and significant judgment. The historical loss experience on the receivable portfolio represents one of the key assumptions involved in determining the allowance for credit losses. Over the last five fiscal years, this percent has varied by an average of approximately plus or minus .06 percent, compared to the average loss experience percent during that period. Holding other assumptions constant, if this estimated loss experience on the receivable portfolio were to increase or decrease .06 percent, the allowance for credit losses at October 31, 2016 would increase or decrease by approximately \$19 million.

#### Operating Lease Residual Values

The carrying value of equipment on operating leases is affected by the estimated fair values of the equipment at the end of the lease (residual values). Upon termination of the lease, the equipment is either purchased by the lessee or sold to a third party, in which case the company may record a gain or a loss for the difference between the estimated residual value and the sales price. The residual values are dependent on current economic conditions and are reviewed when events or circumstances necessitate an evaluation. Changes in residual value assumptions would affect the amount of depreciation

expense and the amount of investment in equipment on operating leases

The total operating lease residual values at October 31, 2016, 2015 and 2014 were \$4,347 million, \$3,603 million and \$2,786 million, respectively. The changes in 2016 and 2015 were due primarily to the increasing levels of operating leases.

Estimates used in determining end of lease market values for equipment on operating leases significantly impact the amount and timing of depreciation expense. Hypothetically, if future market values for this equipment were to decrease 10 percent from the company's present estimates, the total impact would be to increase the company's annual depreciation for equipment on operating leases by approximately \$200 million.

#### **Income Taxes**

The company's income tax provision, deferred income tax assets and liabilities, and liabilities for uncertain tax benefits represent the company's best estimate of current and future income taxes to be paid. The annual tax rate is based on income tax laws, statutory tax rates, taxable income levels and tax planning opportunities available in various jurisdictions where the company operates. These tax laws are complex, and require significant judgement to determine the consolidated provision for income taxes. Changes in tax laws, statutory tax rates and estimates of the company's future taxable income levels could result in actual realization of deferred taxes being materially different from amounts provided for in the consolidated financial statements.

Deferred income taxes represent temporary differences between the tax and the financial reporting basis of assets and liabilities, which will result in taxable or deductible amounts in the future. Deferred tax assets also include loss carryforwards and tax credits. These assets are regularly assessed for the likelihood of recoverability from estimated future taxable income, reversal of deferred tax liabilities and tax planning strategies. To the extent the company determines that it is more likely than not a deferred income tax asset will not be realized, a valuation allowance is established. The recoverability analysis of the deferred income tax assets and the related valuation allowances requires significant judgement and relies on estimates.

Uncertain tax positions are determined based on whether it is more likely than not the tax positions will be sustained based on the technical merits of the position. For those positions that meet the more likely than not criteria, an estimate of the largest amount of tax benefit that is greater than 50 percent likely to be realized upon ultimate settlement with the related tax authority is recognized. The ultimate resolution of the tax position could take many years and result in a payment that is significantly different than the original estimate.

A provision for U.S. income taxes or foreign withholding taxes has not been recorded on undistributed profits of the company's non-U.S. subsidiaries that are not currently taxable in the U.S. and that are determined to be indefinitely reinvested outside the U.S. If management intentions or U.S. tax law changes in the future, there may be a significant impact on the provision for income taxes in the period the change occurs. For further information on income taxes, see Note 8 to the consolidated financial statements.

#### FINANCIAL INSTRUMENT MARKET RISK INFORMATION

The company is naturally exposed to various interest rate and foreign currency risks. As a result, the company enters into derivative transactions to manage certain of these exposures that arise in the normal course of business and not for the purpose of creating speculative positions or trading. The company's financial services operations manage the relationship of the types and amounts of their funding sources to their receivable and lease portfolio in an effort to diminish risk due to interest rate and foreign currency fluctuations, while responding to favorable financing opportunities. Accordingly, from time to time, these operations enter into interest rate swap agreements to manage their interest rate exposure. The company also has foreign currency exposures at some of its foreign and domestic operations related to buying, selling and financing in currencies other than the functional currencies. The company has entered into agreements related to the management of these foreign currency transaction risks.

#### Interest Rate Risk

Quarterly, the company uses a combination of cash flow models to assess the sensitivity of its financial instruments with interest rate exposure to changes in market interest rates. The models calculate the effect of adjusting interest rates as follows. Cash flows for financing receivables are discounted at the current prevailing rate for each receivable portfolio. Cash flows for marketable securities are primarily discounted at the applicable benchmark yield curve plus market credit spreads. Cash flows for unsecured borrowings are discounted at the applicable benchmark yield curve plus market credit spreads for similarly rated borrowers. Cash flows for securitized borrowings are discounted at the swap yield curve plus a market credit spread for similarly rated borrowers. Cash flows for interest rate swaps are projected and discounted using forward rates from the swap yield curve at the repricing dates. The net loss in these financial instruments' fair values which would be caused by increasing the interest rates by 10 percent from the market rates at October 31, 2016 would have been approximately \$13 million. The net loss from increasing the interest rates by 10 percent at October 31, 2015 would have been approximately \$14 million.

#### Foreign Currency Risk

In the equipment operations, the company's practice is to hedge significant currency exposures. Worldwide foreign currency exposures are reviewed quarterly. Based on the equipment operations' anticipated and committed foreign currency cash inflows, outflows and hedging policy for the next twelve months, the company estimates that a hypothetical 10 percent strengthening of the U.S. dollar relative to other currencies through 2017 would decrease the 2017 expected net cash inflows by approximately \$77 million. At October 31, 2015, a hypothetical 10 percent strengthening of the U.S. dollar under similar assumptions and calculations indicated a potential \$32 million adverse effect on the 2016 net cash inflows.

In the financial services operations, the company's policy is to hedge the foreign currency risk if the currency of the borrowings does not match the currency of the receivable portfolio. As a result, a hypothetical 10 percent adverse change in the value of the U.S. dollar relative to all other foreign currencies would not have a material effect on the financial services cash flows.

# DEERE & COMPANY STATEMENT OF CONSOLIDATED INCOME For the Years Ended October 31, 2016, 2015 and 2014 (In millions of dollars)

		2016	2015		2014
Net Sales and Revenues					
Net sales	\$	23,387.3	\$ 25,775.2	\$	32,960.6
Finance and interest income		2,511.2	2,381.1		2,282.1
Other income		745.5	706.5		824.2
Total		26,644.0	28,862.8		36,066.9
Costs and Expenses					
Cost of sales		18,248.9	20,143.2		24,775.8
Research and development expenses		1,389.1	1,425.1		1,452.0
Selling, administrative and general expenses		2,763.7	2,873.3		3,284.4
Interest expense		763.7	680.0		664.0
Other operating expenses		1,254.6	961.1		1,093.3
Total		24,420.0	26,082.7		31,269.5
Income of Consolidated Group before Income Taxes		2,224.0	2.780.1		4,797.4
Provision for income taxes		700.1	840.1		1,626.5
Income of Consolidated Group		1,523.9	1,940.0		3,170.9
Equity in income (loss) of unconsolidated affiliates	<u> </u>	(2.4)	•		(7.6)
Net Income		1.521.5	1.940.9		3.163.3
Less: Net income (loss) attributable to noncontrolling interests		(2.4)	,		1.6
Net Income Attributable to Deere & Company	\$	1,523.9	\$ 1,940.0	\$	3,161.7
Per Share Data					
Basic	\$	4.83	\$ 5.81	\$	8.71
Diluted	\$	4.81			8.63
Dividends declared	\$	2.40		-	2.22
Average Shares Outstanding					
Basic		315.2	333.6		363.0
Diluted		316.6	336.0		366.1

# DEERE & COMPANY STATEMENT OF CONSOLIDATED COMPREHENSIVE INCOME For the Years Ended October 31, 2016, 2015 and 2014 (In millions of dollars)

	2016	2015	2014
Net Income	\$ 1,521.5	\$ 1,940.9	\$ 3,163.3
Other Comprehensive Income (Loss), Net of Income Taxes	 		
Retirement benefits adjustment	(907.6)	(7.7)	(684.4)
Cumulative translation adjustment	9.0	(935.1)	(415.5)
Unrealized gain (loss) on derivatives	2.9	(2.5)	2.8
Unrealized gain (loss) on investments	(.9)	(1.5)	6.9
Other Comprehensive Income (Loss), Net of Income Taxes	(896.6)	(946.8)	(1,090.2)
Comprehensive Income of Consolidated Group	624.9	994.1	2,073.1
Less: Comprehensive income (loss) attributable to noncontrolling interests	(2.4)	.5	1.3
Comprehensive Income Attributable to Deere & Company	\$ 627.3	\$ 993.6	\$ 2,071.8

## DEERE & COMPANY CONSOLIDATED BALANCE SHEET

As of October 31, 2016 and 2015 (In millions of dollars except per share amounts)

		2016		2015
ASSETS				
Cash and cash equivalents	\$	4,335.8	\$	4,162.2
Marketable securities		453.5		437.4
Receivables from unconsolidated affiliates		16.5		33.3
Trade accounts and notes receivable – net		3,011.3		3,051.1
Financing receivables – net		23,702.3		24,809.0
Financing receivables securitized – net		5,126.5		4,834.6
Other receivables		1,018.5		991.2
Equipment on operating leases – net		5,901.5		4,970.4
Inventories		3,340.5		3,817.0
Property and equipment – net		5,170.6		5,181.5
Investments in unconsolidated affiliates		232.6		303.5
Goodwill		815.7		726.0
Other intangible assets – net		104.1		63.6
Retirement benefits		93.6		215.6
Deferred income taxes		2,964.4		2,767.3
Other assets		1,694.0		1,583.9
Total Assets	\$	57,981.4	\$	57,947.6
LIABILITIES Short-term borrowings Short-term securitization borrowings Payables to unconsolidated affiliates Accounts payable and accrued expenses Deferred income taxes Long-term borrowings Retirement benefits and other liabilities Total liabilities	\$	6,912.2 5,002.5 81.6 7,240.1 166.0 23,759.7 8,274.5 51,436.6	\$	8,426.6 4,590.0 80.6 7,311.5 160.8 23,832.8 6,787.7 51,190.0
Commitments and contingencies (Note 22)		44.0		
Redeemable noncontrolling interest (Note 4)		14.0		
STOCKHOLDERS' EQUITY				
Common stock, \$1 par value (authorized – 1,200,000,000 shares;		3.911.8		3.825.6
issued – 536 431 204 shares in 2016 and 2015), at paid-in amount		(15,677.1)		(15,497.6
issued – 536,431,204 shares in 2016 and 2015), at paid-in amount  Common stock in treasury, 221,663,380 shares in 2016 and 219,743,893 shares in 2015, at cost		(10,011.1)		23,144.8
Common stock in treasury, 221,663,380 shares in 2016 and 219,743,893 shares in 2015, at cost		23 911 3		20, 174.0
Common stock in treasury, 221,663,380 shares in 2016 and 219,743,893 shares in 2015, at cost Retained earnings		23,911.3		(4 720 4
Common stock in treasury, 221,663,380 shares in 2016 and 219,743,893 shares in 2015, at cost Retained earnings Accumulated other comprehensive income (loss)		(5,626.0)	_	
Common stock in treasury, 221,663,380 shares in 2016 and 219,743,893 shares in 2015, at cost Retained earnings Accumulated other comprehensive income (loss) Total Deere & Company stockholders' equity	_	(5,626.0) 6,520.0		6,743.4
Common stock in treasury, 221,663,380 shares in 2016 and 219,743,893 shares in 2015, at cost Retained earnings Accumulated other comprehensive income (loss) Total Deere & Company stockholders' equity Noncontrolling interests		(5,626.0) 6,520.0 10.8		(4,729.4 6,743.4 14.2
Common stock in treasury, 221,663,380 shares in 2016 and 219,743,893 shares in 2015, at cost Retained earnings Accumulated other comprehensive income (loss) Total Deere & Company stockholders' equity		(5,626.0) 6,520.0	 \$	6,743.4

	2016	2015	2014
Cash Flows from Operating Activities			
Net income	\$ 1,521.5	\$ 1,940.9	\$ 3,163.3
Adjustments to reconcile net income to net cash provided by operating activities:			
Provision for credit losses	94.3	55.4	38.1
Provision for depreciation and amortization	1,559.8	1,382.4	1,306.5
Impairment charges	85.1	34.8	95.9
Share-based compensation expense	70.6	66.1	78.5
Undistributed earnings of unconsolidated affiliates	(1.9)	(1.0)	9.3
Provision (credit) for deferred income taxes	282.7	(18.4)	(280.1)
Changes in assets and liabilities:			
Trade, notes and financing receivables related to sales	335.2	811.6	(749.0)
Insurance receivables		333.4	(149.9)
Inventories	(106.1)	(691.4)	(297.9)
Accounts payable and accrued expenses	(155.2)	(503.6)	(137.1)
Accrued income taxes payable/receivable	1.6	(137.6)	342.6
Retirement benefits	238.6	427.5	336.9
Other	(161.9)	40.2	(231.2)
Net cash provided by operating activities	3,764.3	3,740.3	3.525.9
the sact product of operating downsor			
Cash Flows from Investing Activities			
Collections of receivables (excluding receivables related to sales)	14,611.4	14,919.7	15,319.1
Proceeds from maturities and sales of marketable securities	169.4	860.7	1,022.5
Proceeds from sales of equipment on operating leases	1,256.2	1.049.4	1.091.5
Proceeds from sales of businesses and unconsolidated affiliates, net of cash sold	81.1	149.2	345.8
Cost of receivables acquired (excluding receivables related to sales)	(13,954.5)	(14,996.5)	(17,240.4)
Purchases of marketable securities	(171.2)	. , ,	(614.6)
Purchases of property and equipment	(644.4)		(1,048.3)
Cost of equipment on operating leases acquired	(2,310.7)		(1,611.0)
Acquisitions of businesses, net of cash acquired	(198.5)	• • • •	(1,01110)
Other	(16.0)		(145.6)
Net cash used for investing activities	(1,177.2)		(2,881.0)
Not dust used for investing delivines	(1,177.2)	(1,000.1)	(2,001.0)
Cash Flows from Financing Activities			
Increase (decrease) in total short-term borrowings	(1,213.6)	501.6	89.2
Proceeds from long-term borrowings	5,070.7	5,711.0	8,232.0
Payments of long-term borrowings	(5,267.6)		
Proceeds from issuance of common stock	36.0	172.1	149.5
Repurchases of common stock	(205.4)		(2,731.1)
Dividends paid	(761.3)		(786.0)
Excess tax benefits from share-based compensation	5.4		30.8
Other	(64.7)		(63.6)
Net cash used for financing activities	(2,400.5)		(288.3)
Effect of Exchange Rate Changes on Cash and Cash Equivalents	(13.0)		(73.6)
	173.6	375.2	283.0
Net Increase in Cash and Cash Equivalents			
Cash and Cash Equivalents at Beginning of Year	4,162.2	3,787.0	3,504.0
Cash and Cash Equivalents at End of Year	\$ 4,335.8	\$ 4,162.2	\$ 3,787.0

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					olders' Equity			
			Deere & Com	pany Stocki	nolders			
	Total				Accumulated Other			edeemable
	Stockholders'	Common Stock	Treasury Stock	Retained	Comprehensive	Noncontrolling Interests	No	ncontrolling Interest
Dalamas Ostahan 24, 2042	Equity			Earnings	Income (Loss)		_	interest
Balance October 31, 2013	\$ 10,267.7	\$ 3,524.2	\$ (10,210.9)	\$ 19,645.6	\$ (2,693.1)	\$ 1.9		
Net income	3.163.3			3,161.7		1.6		
Other comprehensive loss	(1,090.2)			-,	(1,089.9)	(.3)		
Repurchases of common stock	(2,731.1)		(2,731.1)		(1,00010)	(10)		
Treasury shares reissued	107.8		107.8					
Dividends declared	(803.7)			(803.4)		(.3)		
Stock options and other	`151.7 <sup>°</sup>	151.2		` .5 <sup>´</sup>		( )		
Balance October 31, 2014	9,065.5	3,675.4	(12,834.2)	22,004.4	(3,783.0)	2.9		
, and the second second			,		, ,			
Net income	1,940.9			1,940.0		.9		
Other comprehensive loss	(946.8)				(946.4)	(.4)		
Repurchases of common stock	(2,770.7)		(2,770.7)					
Treasury shares reissued	107.3		107.3					
Dividends declared	(8.008)			(799.5)		(1.3)		
Stock options and other	162.2	150.2		(.1)		12.1		
Balance October 31, 2015	6,757.6	3,825.6	(15,497.6)	23,144.8	(4,729.4)	14.2		
Net income (loss)	1,521.5			1,523.9		(2.4)		
Other comprehensive loss	(896.6)				(896.6)			
Repurchases of common stock	(205.4)		(205.4)					
Treasury shares reissued	25.9		25.9					
Dividends declared	(758.0)			(757.1)		(.9)		4.4.0
Acquisition (Note 4)	0-0	00.0					\$	14.0
Stock options and other	85.8	86.2		(.3)		(.1)		
Balance October 31, 2016	\$ 6,530.8	\$ 3,911.8	<u>\$ (15,677.1</u> )	\$ 23,911.3	\$ (5,626.0)	\$ 10.8	\$	14.0

The notes to consolidated financial statements are an integral part of this statement.

#### 1. ORGANIZATION AND CONSOLIDATION

#### **Structure of Operations**

The information in the notes and related commentary are presented in a format which includes data grouped as follows:

Equipment Operations – Includes the company's agriculture and turf operations and construction and forestry operations with financial services reflected on the equity basis.

Financial Services – Includes primarily the company's financing operations.

Consolidated – Represents the consolidation of the equipment operations and financial services. References to "Deere & Company" or "the company" refer to the entire enterprise.

#### **Principles of Consolidation**

The consolidated financial statements represent primarily the consolidation of all companies in which Deere & Company has a controlling interest. Certain variable interest entities (VIEs) are consolidated since the company has both the power to direct the activities that most significantly impact the VIEs' economic performance and the obligation to absorb losses or the right to receive benefits that could potentially be significant to the VIEs. Deere & Company records its investment in each unconsolidated affiliated company (generally 20 to 50 percent ownership) at its related equity in the net assets of such affiliate (see Note 10). Other investments (less than 20 percent ownership) are recorded at cost.

#### **Fiscal Year**

The company uses a 52/53 week fiscal year ending on the last Sunday in the reporting period. The fiscal year ends for 2016, 2015 and 2014 were October 30, 2016, November 1, 2015 and November 2, 2014, respectively. Fiscal year 2014 contained 53 weeks. For ease of presentation, the consolidated financial statements and notes continue to be dated October 31.

#### Variable Interest Entities

See Note 13 for VIEs related to securitization of financing receivables.

#### 2. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES

The following are significant accounting policies in addition to those included in other notes to the consolidated financial statements.

#### Use of Estimates in Financial Statements

The preparation of financial statements in conformity with accounting principles generally accepted in the U.S. requires management to make estimates and assumptions that affect the reported amounts and related disclosures. Actual results could differ from those estimates.

#### **Revenue Recognition**

Sales of equipment and service parts are recorded when the sales price is determinable and the risks and rewards of ownership are transferred to independent parties based on the sales agreements in effect. In the U.S. and most international locations, this transfer occurs primarily when goods are shipped. In Canada and some other international locations, certain goods are shipped to dealers on a consignment basis under which the risks and rewards of ownership are not transferred to the dealer. Accordingly, in these locations, sales are not recorded until a retail customer has purchased the goods. In all cases, when a

sale is recorded by the company, no significant uncertainty exists surrounding the purchaser's obligation to pay. No right of return exists on sales of equipment. Service parts and certain attachments returns are estimable and accrued at the time a sale is recognized. The company makes appropriate provisions based on experience for costs such as doubtful receivables, sales incentives and product warranty.

Financing revenue is recorded over the lives of related receivables using the interest method. Extended warranty premiums recorded in other income are generally recognized in proportion to the costs expected to be incurred over the contract period. Deferred costs on the origination of financing receivables are recognized as a reduction in finance revenue over the expected lives of the receivables using the interest method. Income and deferred costs on the origination of operating leases are recognized on a straight-line basis over the scheduled lease terms in finance revenue.

#### Sales Incentives

At the time a sale is recognized, the company records an estimate of the future sales incentive costs for allowances and financing programs that will be due when a dealer sells the equipment to a retail customer. The estimate is based on historical data, announced incentive programs, field inventory levels and retail sales volumes.

#### **Product Warranties**

At the time a sale is recognized, the company records the estimated future warranty costs. These costs are usually estimated based on historical warranty claims (see Note 22).

#### Sales Taxes

The company collects and remits taxes assessed by different governmental authorities that are both imposed on and concurrent with revenue producing transactions between the company and its customers. These taxes may include sales, use, value-added and some excise taxes. The company reports the collection of these taxes on a net basis (excluded from revenues).

#### **Shipping and Handling Costs**

Shipping and handling costs related to the sales of the company's equipment are included in cost of sales.

#### **Advertising Costs**

Advertising costs are charged to expense as incurred. This expense was \$169 million in 2016, \$157 million in 2015 and \$174 million in 2014.

## **Depreciation and Amortization**

Property and equipment, capitalized software and other intangible assets are generally stated at cost less accumulated depreciation or amortization. These assets are depreciated over their estimated useful lives generally using the straight-line method. Equipment on operating leases is depreciated over the terms of the leases using the straight-line method. Property and equipment expenditures for new and revised products, increased capacity and the replacement or major renewal of significant items are capitalized. Expenditures for maintenance, repairs and minor renewals are generally charged to expense as incurred.

## Securitization of Receivables

Certain financing receivables are periodically transferred to special purpose entities (SPEs) in securitization transactions (see

Note 13). These securitizations qualify as collateral for secured borrowings and no gains or losses are recognized at the time of securitization. The receivables remain on the balance sheet and are classified as "Financing receivables securitized – net." The company recognizes finance income over the lives of these receivables using the interest method.

#### **Receivables and Allowances**

All financing and trade receivables are reported on the balance sheet at outstanding principal adjusted for any charge-offs, the allowance for credit losses, and any deferred fees or costs on originated financing receivables. Allowances for credit losses are maintained in amounts considered to be appropriate in relation to the receivables outstanding based on collection experience, economic conditions and credit risk quality. Receivables are written-off to the allowance when the account is considered uncollectible.

## Impairment of Long-Lived Assets, Goodwill and Other Intangible Assets

The company evaluates the carrying value of long-lived assets (including equipment on operating leases, property and equipment, goodwill and other intangible assets) when events or circumstances warrant such a review. Goodwill and intangible assets with indefinite lives are tested for impairment annually at the end of the third fiscal quarter each year, and more often if events or circumstances indicate a reduction in the fair value below the carrying value. Goodwill is allocated and reviewed for impairment by reporting units, which consist primarily of the operating segments and certain other reporting units. The goodwill is allocated to the reporting unit in which the business that created the goodwill resides. To test for goodwill impairment, the carrying value of each reporting unit is compared with its fair value. If the carrying value of the goodwill or long-lived asset is considered impaired, a loss is recognized based on the amount by which the carrying value exceeds the fair value of the asset (see Notes 5 and 26).

#### **Derivative Financial Instruments**

It is the company's policy that derivative transactions are executed only to manage exposures arising in the normal course of business and not for the purpose of creating speculative positions or trading. The company's financial services manage the relationship of the types and amounts of their funding sources to their receivable and lease portfolio in an effort to diminish risk due to interest rate and foreign currency fluctuations, while responding to favorable financing opportunities. The company also has foreign currency exposures at some of its foreign and domestic operations related to buying, selling and financing in currencies other than the functional currencies.

All derivatives are recorded at fair value on the balance sheet. Cash collateral received or paid is not offset against the derivative fair values on the balance sheet. Each derivative is designated as either a cash flow hedge, a fair value hedge, or remains undesignated. Changes in the fair value of derivatives that are designated and effective as cash flow hedges are recorded in other comprehensive income and reclassified to the income statement when the effects of the item being hedged are recognized in the income statement. Changes in the fair value of derivatives that are designated and effective as fair value hedges are recognized currently in net income. These changes are offset in net income to the extent the hedge was

effective by fair value changes related to the risk being hedged on the hedged item. Changes in the fair value of undesignated hedges are recognized currently in the income statement. All ineffective changes in derivative fair values are recognized currently in net income.

All designated hedges are formally documented as to the relationship with the hedged item as well as the risk-management strategy. Both at inception and on an ongoing basis the hedging instrument is assessed as to its effectiveness. If and when a derivative is determined not to be highly effective as a hedge, the underlying hedged transaction is no longer likely to occur, the hedge designation is removed, or the derivative is terminated, the hedge accounting discussed above is discontinued (see Note 27).

#### Foreign Currency Translation

The functional currencies for most of the company's foreign operations are their respective local currencies. The assets and liabilities of these operations are translated into U.S. dollars at the end of the period exchange rates. The revenues and expenses are translated at weighted-average rates for the period. The gains or losses from these translations are recorded in other comprehensive income. Gains or losses from transactions denominated in a currency other than the functional currency of the subsidiary involved and foreign exchange forward contracts are included in net income. The pretax net gain (loss) for foreign exchange in 2016, 2015 and 2014 was \$(38) million, \$22 million and \$(47) million, respectively.

#### 3. NEW ACCOUNTING STANDARDS

#### **New Accounting Standard Adopted**

In September 2015, the Financial Accounting Standards Board (FASB) issued Accounting Standards Update (ASU) No. 2015-16, Simplifying the Accounting for Measurement-Period Adjustments, which amends Accounting Standards Codification (ASC) 805, Business Combinations. This ASU requires that acquiring entities recognize measurement period adjustments in the reporting period the amounts are determined, including earnings adjustments that would have been recorded in previous periods if the adjustments were known at the acquisition date. The company early adopted this ASU in the second quarter of 2016. The adoption did not have a material effect on the company's consolidated financial statements.

#### New Accounting Standards to be Adopted

In May 2014, the FASB issued ASU No. 2014-09, Revenue from Contracts with Customers (Topic 606), which supersedes the revenue recognition requirements in ASC 605, Revenue Recognition. This ASU is based on the principle that revenue is recognized to depict the transfer of goods or services to customers in an amount that reflects the consideration to which the entity expects to be entitled in exchange for those goods or services. The ASU also requires additional disclosure about the nature, amount, timing and uncertainty of revenue. In August 2015, the FASB amended the effective date to be the first quarter of fiscal year 2019 with early adoption permitted in the first quarter of fiscal year 2018. The FASB issued several amendments clarifying various aspects of the ASU, including revenue transactions that involve a third party, goods or services that are immaterial in the context of the contract and licensing arrangements. The adoption will use one of two retrospective application methods. The company plans to adopt the ASU

effective the first quarter of fiscal year 2019 and is evaluating the potential effects on the consolidated financial statements.

In June 2014, the FASB issued ASU No. 2014-12, Accounting for Share-Based Payments When the Terms of an Award Provide That a Performance Target Could Be Achieved after the Requisite Service Period, which amends ASC 718, Compensation - Stock Compensation. This ASU requires that a performance target that affects vesting and that could be achieved after the requisite service period be treated as a performance condition. Compensation cost should be recognized in the period in which it becomes probable that the performance target will be achieved and should represent the compensation cost attributable to the periods the service has already been rendered. The total compensation cost recognized during and after the requisite service period should reflect the number of awards that are expected to vest and should be adjusted to reflect those awards that ultimately vest. The effective date will be the first quarter of fiscal year 2017. The adoption will not have a material effect on the company's consolidated financial statements.

In April 2015, the FASB issued ASU No. 2015-03, Simplifying the Presentation of Debt Issuance Costs, which amends ASC 835-30, Interest – Imputation of Interest. This ASU requires that debt issuance costs related to borrowings be presented in the balance sheet as a direct deduction from the carrying amount of the borrowing. The effective date will be the first quarter of fiscal year 2017 and will be applied retrospectively. The adoption will not have a material effect on the company's consolidated financial statements.

In April 2015, the FASB issued ASU No. 2015-05, Customer's Accounting for Fees Paid in a Cloud Computing Arrangement, which amends ASC 350-40, Intangibles-Goodwill and Other-Internal-Use Software. This ASU provides guidance to customers about whether a cloud computing arrangement includes a software license. If an arrangement includes a software license, the accounting for the license will be consistent with licenses of other intangible assets. If the arrangement does not include a license, the arrangement will be accounted for as a service contract. The effective date will be the first quarter of fiscal year 2017 and will be adopted prospectively. The adoption will not have a material effect on the company's consolidated financial statements.

In July 2015, the FASB issued ASU No. 2015-11, Simplifying the Measurement of Inventory, which amends ASC 330, Inventory. This ASU simplifies the subsequent measurement of inventory by using only the lower of cost or net realizable value. The ASU does not apply to inventory measured using the last-in, first-out method. The company will early adopt the ASU in the first quarter of fiscal year 2017. The adoption will not have a material effect on the company's consolidated financial statements.

In August 2015, the FASB issued ASU No. 2015-15, Presentation and Subsequent Measurement of Debt Issuance Costs Associated with Line-of-Credit Arrangements, which amends ASC 835-30, Interest – Imputation of Interest. This ASU clarifies the presentation and subsequent measurement of debt issuance costs associated with lines of credit. These costs may be presented as an asset and amortized ratably over the term of the line of credit arrangement, regardless of whether there are outstanding borrowings on the arrangement. The effective date will be the first quarter of fiscal year 2017 and will be applied

retrospectively. The adoption will not have a material effect on the company's consolidated financial statements.

In January 2016, the FASB issued ASU No. 2016-01, Recognition and Measurement of Financial Assets and Financial Liabilities, which amends ASC 825-10, Financial Instruments – Overall. This ASU changes the treatment for available-for-sale equity investments by recognizing unrealized fair value changes directly in net income, and no longer in other comprehensive income. The effective date will be the first quarter of fiscal year 2019. Early adoption of the provisions affecting the company is not permitted. The ASU will be adopted with a cumulative-effect adjustment to the balance sheet in the year of adoption. The company is evaluating the potential effects on the consolidated financial statements.

In February 2016, the FASB issued ASU No. 2016-02, Leases (Topic 842), which supersedes ASC 840, Leases. The ASU's primary change is the requirement for lessee entities to recognize a lease liability for payments and a right of use asset during the term of operating lease arrangements. The ASU does not significantly change the lessee's recognition, measurement and presentation of expenses and cash flows from the previous accounting standard. Lessors' accounting under the ASC is largely unchanged from the previous accounting standard. Lessees and lessors will use a modified retrospective transition approach. The effective date will be the first quarter of fiscal year 2020 with early adoption permitted. The company is evaluating the potential effects on the consolidated financial statements.

In March 2016, the FASB issued ASU No. 2016-07, Simplifying the Transition to the Equity Method of Accounting, which amends ASC 323, Investments – Equity Method and Joint Ventures. This ASU eliminates the requirement to retroactively restate the investment, results of operations and retained earnings on a step by step basis when an investment qualifies for use of the equity method as a result of an increase in ownership or degree of influence. The effective date will be the first quarter of fiscal year 2018, with early adoption permitted, and will be adopted prospectively. The adoption will not have a material effect on the company's consolidated financial statements.

In March 2016, the FASB issued ASU No. 2016-09, Improvements to Employee Share-Based Payment Accounting, which amends ASC 718, Compensation – Stock Compensation. This ASU simplifies the treatment of share based payment transactions by recognizing the impact of excess tax benefits or deficiencies related to exercised or vested awards in income tax expense in the period of exercise or vesting. This change will be recognized prospectively. The presentation of excess tax benefits in the statement of consolidated cash flows is also modified to be included with other income tax cash flows as an operating activity. The change can be adopted using a prospective or retrospective transition method. The ASU also clarifies that cash paid by an employer when directly withholding shares for tax withholding purposes should be presented as a financing activity in the statement of consolidated cash flows and should be applied retrospectively. The effective date will be the first quarter of fiscal year 2018, with early adoption permitted. The company is evaluating the potential effects on the consolidated financial statements.

In June 2016, the FASB issued ASU No. 2016-13, Measurement of Credit Losses on Financial Instruments, which establishes ASC 326, Financial Instruments – Credit Losses. The ASU revises the measurement of credit losses for financial assets measured at amortized cost from an incurred loss methodology to an expected loss methodology. The ASU affects trade receivables, debt securities, net investment in leases and most other financial assets that represent a right to receive cash. Additional disclosures about significant estimates and credit quality are also required. The effective date will be the first quarter of fiscal year 2021, with early adoption permitted beginning in fiscal year 2020. The ASU will be adopted using a modified-retrospective approach. The company is evaluating the potential effects on the consolidated financial statements.

In August 2016, the FASB issued ASU No. 2016-15, Classification of Certain Cash Receipts and Cash Payments, which amends ASC 230, Statement of Cash Flows. This ASU provides guidance on the statement of cash flows presentation of certain transactions where diversity in practice exists. The effective date will be the first quarter of fiscal year 2019, with early adoption permitted. The ASU will be adopted using a retrospective transition approach. The adoption will not have a material effect on the company's consolidated financial statements

In October 2016, the FASB issued ASU No. 2016-16, Intra-Entity Transfers of Assets Other Than Inventory, which amends ASC 740, Income Taxes. This ASU requires that the income tax consequences of an intra-entity asset transfer other than inventory are recognized at the time of the transfer. The effective date will be the first quarter of fiscal year 2019, with early adoption permitted. The ASU will be adopted using a modified-retrospective approach. The adoption will not have a material effect on the company's consolidated financial statements.

In November 2016, the FASB issued ASU No. 2016-18, Restricted Cash, which amends ASC 230, Statement of Cash Flows. This ASU requires that a statement of cash flows explain the change during the reporting period in the total of cash, cash equivalents, and restricted cash or restricted cash equivalents. The effective date will be the first quarter of fiscal year 2019, with early adoption permitted, and will be adopted using a retrospective transition approach. The adoption will not have a material effect on the company's consolidated financial statements.

#### 4. ACQUISITIONS AND DISPOSITIONS

In March 2016, the company acquired an 80 percent interest in Hagie Manufacturing Company, LLC, the U.S. market leader in high-clearance sprayers located in Clarion, lowa, for a cost of approximately \$53 million, net of cash acquired of \$3 million. The fair values assigned to the assets and liabilities related to the acquired entity were approximately \$2 million of trade receivables, \$33 million of inventories, \$17 million of property and equipment, \$33 million of goodwill, \$22 million of identifiable intangible assets, \$3 million of other assets and \$43 million of accounts payable and accrued expenses, with a \$14 million redeemable noncontrolling interest. The identifiable intangibles were primarily related to technology, trade name and customer relationships, which have a weighted average amortization period of eight years. The goodwill is expected to be deducted for tax purposes. If certain events occur, the

minority interest holder has the right to exercise a put option that would require the company to purchase the holder's membership interest. The company also has a call option exercisable after a certain period of time. The put and call options cannot be separated from the noncontrolling interest. Due to the redemption features, the minority interest holder's value is classified as a redeemable noncontrolling interest in the company's consolidated balance sheet.

In February 2016, the company acquired Monosem for a cost of approximately \$146 million, net of cash acquired of \$20 million. Monosem, with four facilities in France and two in the U.S., is the European market leader in precision planters. The fair values assigned to the assets and liabilities related to the acquired entity were approximately \$5 million of trade receivables, \$2 million of other receivables, \$29 million of inventories, \$24 million of property and equipment, \$62 million of goodwill, \$42 million of identifiable intangible assets, \$23 million of other assets, \$22 million of accounts payable and accrued expenses and \$19 million of deferred tax liabilities. The identifiable intangibles were primarily related to trade name, customer relationships and technology, which have a weighted average amortization period of nine years. The goodwill is not expected to be deducted for tax purposes.

For both 2016 acquisitions, the entities were consolidated and the results of these operations have been included in the company's consolidated financial statements in the agriculture and turf operating segment since the date of acquisition. The pro forma results of operations as if the acquisitions had occurred at the beginning of the current or comparative fiscal year would not differ significantly from the reported results.

In March 2015, the company closed the sale of all of the stock of its wholly-owned subsidiaries, John Deere Insurance Company and John Deere Risk Protection, Inc. (collectively the Crop Insurance operations) to Farmers Mutual Hail Insurance Company of Iowa. These operations were included in the company's financial services operating segment. At January 31, 2015, the total assets of \$381 million and liabilities of \$267 million were classified as held for sale in the consolidated financial statements, which consisted of \$13 million of cash and cash equivalents, \$79 million of marketable securities, \$265 million of other receivables, \$4 million of other intangible assets-net and \$20 million of other assets. The related liabilities held for sale consisted of accounts payable and accrued expenses. The total amount of proceeds from the sale was approximately \$154 million, including \$5 million of cash and cash equivalents sold, with a gain recorded in other income of \$42 million pretax and \$40 million after-tax. The tax expense was partially offset by a change in a valuation allowance on a capital loss carryforward. The company provided certain business services for a fee during a transition period.

In May 2014, the company closed the sale of the stock and certain assets of the entities that compose the company's Water operations to FIMI Opportunity Funds. At April 30, 2014, the total assets of \$85 million and liabilities of \$50 million were classified as held for sale in the consolidated financial statements. The total amount of proceeds from the sale was approximately \$35 million with a loss recorded in other operating expenses of \$10 million pretax and after-tax in addition to the

impairments recorded (see Note 5). The company provided certain business services for a fee during a transition period.

In December 2013, the company sold 60 percent of its subsidiary John Deere Landscapes, LLC (Landscapes) to a private equity investment firm affiliated with Clayton, Dubilier & Rice, LLC (CD&R). At October 31, 2013, the total assets of \$505 million and liabilities of \$120 million for these operations were classified as held for sale in the consolidated financial statements and written down to realizable value. The total amount of proceeds from the sale at closing was approximately \$305 million with no significant additional gain or loss, after recording a non-cash charge in the fourth quarter of 2013 of \$45 million pretax and after-tax to write down Landscapes to net realizable value. The proceeds consisted of \$174 million equity contribution and third party debt raised by Landscapes.

The equity contribution was in the form of newly issued cumulative convertible participating preferred units representing 60 percent of the voting rights (on an as converted basis), which were converted to common shares in May 2016 (see Note 5).

The company initially retained 40 percent of the Landscapes business in the form of common stock. As of January 2014, the company deconsolidated Landscapes and began reporting the results as an equity investment in unconsolidated affiliates. Due to the company's continuing involvement through its initial 40 percent interest, Landscapes' historical operating results are presented in continuing operations. Landscapes was rebranded to SiteOne Landscapes Supply, Inc. during 2015.

#### 5. SPECIAL ITEMS

#### Impairments

In the fourth quarter of 2016, the company recorded a non-cash charge in cost of sales for the impairment of long-lived assets of \$13 million pretax and after-tax. The assets are part of the company's construction and forestry operations in China. The impairment is the result of a decline in forecasted financial performance that indicated it was probable the future cash flows would not cover the carrying amount of assets used to manufacture construction equipment in that country. In addition, the company recorded a non-cash charge of \$12 million pretax and after-tax, in equity in loss of unconsolidated affiliates for an other than temporary decline in value of an investment in a construction equipment joint venture in Brazil (see Note 26).

In 2016, the company recorded non-cash charges in other operating expenses of approximately \$31 million pretax for the impairment of equipment on operating leases and approximately \$29 million pretax on matured operating lease inventory recorded in other assets. The impairment was the result of lower estimated values of used agriculture and construction equipment than originally estimated with the probable effect that the future cash flows would not cover the carrying amount of the net assets. The assets are part of the financial services operations (see Note 26).

In the fourth quarter of 2014, the company recorded non-cash charges in cost of sales for the impairment of long-lived assets of \$18 million and other assets of \$16 million pretax and after-tax. The assets are part of the company's agriculture and turf operations in China. The impairment is the result of a decline in forecasted financial performance that indicated it was probable the future cash flows would not cover the carrying

amount of assets used to manufacture agricultural equipment in that country (see Note 26).

In 2014, the company recorded non-cash charges of \$62 million pretax, or \$30 million after-tax, related to the Water operations. In the first quarter, a \$26 million pretax and after-tax loss was recorded in cost of sales for the impairment of long-lived assets. In the second quarter, an additional non-cash charge of \$36 million pretax, or \$4 million after-tax, was recorded in other operating expenses for an impairment to write the Water operations down to fair value less costs to sell. The tax benefits recognized resulted primarily from a change in valuation allowances of the Water operations. These operations were included in the company's agriculture and turf operating segment (see Note 26).

#### Sale of Partial Investment in Unconsolidated Affiliate

In May 2016, the company received a distribution of \$60 million from SiteOne that reduced the company's investment in unconsolidated affiliates. The distribution included \$4 million of a return on investment, which is shown in the statement of consolidated cash flows in undistributed earnings of unconsolidated affiliates in net cash provided by operating activities, and \$56 million of a return of investment shown in other cash flows from investing activities. In May 2016, the company also sold approximately 30 percent of its interest in SiteOne in an initial public offering and terminated a service agreement resulting in gross proceeds of approximately \$81 million with a total gain of \$75 million pretax or \$47 million after-tax. The gain is recorded in other income. The company retained approximately a 24 percent ownership interest in SiteOne. The approximate fair value of the company's holding at the fiscal year end was \$292 million. In December 2016, the company sold an additional portion of its interest in SiteOne. Details of the sale are included in Note 30.

#### 6. CASH FLOW INFORMATION

For purposes of the statement of consolidated cash flows, the company considers investments with purchased maturities of three months or less to be cash equivalents. Substantially all of the company's short-term borrowings, excluding the current maturities of long-term borrowings, mature or may require payment within three months or less.

The equipment operations sell a significant portion of their trade receivables to financial services. These intercompany cash flows are eliminated in the consolidated cash flows.

All cash flows from the changes in trade accounts and notes receivable (see Note 12) are classified as operating activities in the statement of consolidated cash flows as these receivables arise from sales to the company's customers. Cash flows from financing receivables that are related to sales to the company's customers (see Note 12) are also included in operating activities. The remaining financing receivables are related to the financing of equipment sold by independent dealers and are included in investing activities.

The company had the following non-cash operating and investing activities that were not included in the statement of consolidated cash flows. The company transferred inventory to equipment on operating leases of \$685 million, \$674 million and \$794 million in 2016, 2015 and 2014, respectively. The company also had accounts payable related to purchases of property and equipment of \$114 million, \$89 million and \$128 million at October 31, 2016, 2015 and 2014, respectively.

Cash payments for interest and income taxes consisted of the following in millions of dollars:

	2016		2015			2014
Interest:						
Equipment operations	\$	442	\$	471	\$	506
Financial services		524		443		454
Intercompany eliminations		(240)		(253)		(268)
Consolidated	\$	726	\$	661	\$	692
Income taxes:		;				
Equipment operations	\$	314	\$	828	\$	1,640
Financial services		(26)		190		333
Intercompany eliminations		104		(117)		(253)
Consolidated	\$	392	\$	901	\$	1,720

## 7. PENSION AND OTHER POSTRETIREMENT BENEFITS

The company has several defined benefit pension plans and postretirement health care and life insurance plans covering its U.S. employees and employees in certain foreign countries. The company uses an October 31 measurement date for these plans.

The components of net periodic pension cost and the assumptions related to the cost consisted of the following in millions of dollars and in percents:

	2016		2015		2	2014
Pensions						
Service cost	\$	254	\$	282	\$	244
Interest cost		391		474		480
Expected return on plan assets		(775)		(769)		(776)
Amortization of actuarial loss		211		223		177
Amortization of prior service cost		16		25		25
Other postemployment benefits		2		1		5
Settlements/curtailments		11		11		9
Net cost	\$	110	\$	247	\$	164
Weighted-average assumptions						
Discount rates – service cost		4.3%		4.0%		4.5%
Discount rates – interest cost		3.4%		4.0%		4.5%
Rate of compensation increase		3.8%		3.8%		3.8%
Expected long-term rates of return		7.3%		7.3%		7.5%

The components of net periodic postretirement benefits cost and the assumptions related to the cost consisted of the following in millions of dollars and in percents:

	2016		2015		- 2	2014
Health care and life insurance						
Service cost	\$	38	\$	46	\$	44
Interest cost		204		259		267
Expected return on plan assets		(35)		(55)		(72)
Amortization of actuarial loss		73		91		33
Amortization of prior service credit		(78)		(77)		(3)
Settlements/curtailments				1		(1)
Net cost	\$	202	\$	265	\$	268
Weighted-average assumptions						
Discount rates – service cost		5.0%		4.2%		4.7%
Discount rates – interest cost		3.5%		4.2%		4.7%
Expected long-term rates of return		6.6%		7.0%		7.2%

In 2016, the company changed the method used to estimate the service and interest cost components of the net periodic pension and postretirement benefits cost. The new method uses the spot yield curve approach to estimate the service and interest cost by applying the specific spot rates along the yield curve used to determine the benefit plan obligations to relevant projected cash outflows. Previously, the service and interest cost components were determined using a single weighted-average discount rate. The change does not affect the measurement of the total benefit plan obligations as the change in service and interest cost offsets in the actuarial gains and losses recorded in other comprehensive income. The spot yield curve approach provides a more precise measure of service and interest cost by improving the correlation between the projected benefit cash flows and the discrete spot yield curve rates. The company accounted for this change as a change in estimate prospectively beginning in 2016. The discount rate used to measure the 2016 service and interest cost using the single weighted-average discount rate method would have been 4.1 percent for pension and 4.3 percent for postretirement benefits. The decrease in the 2016 total service and interest cost was approximately \$175 million compared to the previous method.

The previous pension cost in net income and other changes in plan assets and benefit obligations in other comprehensive income in millions of dollars were as follows:

	2016		2015		2014
Pensions					
Net cost	\$ 110	) \$	247	\$	164
Retirement benefit adjustments included in other comprehensive (income) loss:					
Net actuarial loss	1,14	)	361		940
Prior service cost		1	66		
Amortization of actuarial loss	(21	1)	(223)		(177)
Amortization of prior service cost	(1	3)	(25)		(25)
Settlements/curtailments	(1	4)	(11)		(9)
Total loss recognized in other comprehensive (income) loss	90	)	168		729
Total recognized in comprehensive (income) loss	\$ 1,01	) \$	415	\$	893

The previous postretirement benefits cost in net income and other changes in plan assets and benefit obligations in other comprehensive income in millions of dollars were as follows:

	2016		2015		2	014
Health care and life insurance						
Net cost	\$	202	\$	265	\$	268
Retirement benefit adjustments						
included in other comprehensive						
(income) loss:						
Net actuarial (gain)						
loss		496		(141)		748
Prior service credit		(3)		(3)		(370)
Amortization of actuarial loss		(73)		(91)		(33)
Amortization of prior service credit		78		77		3
Settlements/curtailments				(2)		1
Total (gain) loss recognized in other comprehensive (income)						
loss		498		(160)		349
Total recognized in comprehensive (income) loss	\$	700	\$	105	\$	617

The benefit plan obligations, funded status and the assumptions related to the obligations at October 31 in millions of dollars follow:

			Health	
	Pensi	ons	Life Insu	ırance
	2016	2015	2016	2015
Change in benefit				
obligations				
Beginning of year balance	\$(12,186)	\$(12,190)	\$(6,084)	\$(6,304)
Service cost	(254)	(282)	(38)	(46)
Interest cost	(391)	(474)	(204)	(259)
Actuarial gain (loss)	(1,001)	(174)	(478)	172
Amendments	(1)	(66)	3	3
Benefits paid	702	781	321	344
Health care subsidies			(16)	(20)
Other postemployment				
benefits	(2)	(1)		
Settlements/curtailments	6	2		1
Foreign exchange and				
other	41	218	(4)	25
End of year balance	(13,086)	(12,186)	(6,500)	(6,084)
Change in plan assets				
(fair value)				
Beginning of year balance	11,164	11,447	689	957
Actual return on plan				
assets	628	582	17	24
Employer contribution	80	83	47	48
Benefits paid	(702)	(781)	(321)	(344)
Settlements	(3)	(2)		
Foreign exchange and				
other	(30)	(165)	3	4
End of year balance	11,137	11,164	435	689
Funded status	\$ (1,949)	\$ (1,022)	\$(6,065)	\$(5,395)
Weighted-average assumptions				
Discount rates	3.6%	4.1%	3.8%	4.3%
Rate of compensation	2.270	,0	2.270	
increase	3.8%	3.8%		

In the fourth quarter of 2015, the company decided to transition Medicare eligible wage and certain Medicare eligible salaried retirees to a Medicare Advantage plan offered by a private insurance company effective in January 2016. This change did not affect the participants' level of benefits and is expected to result in future cost savings for the company.

The mortality assumptions for the 2016 and 2015 benefit plan obligations reflect the most recent tables issued by the Society of Actuaries at that time.

For Medicare eligible salaried retirees that primarily retire after July 1, 1993 and are eligible for postretirement medical benefits, the company's postretirement benefit plan consists of annual Retiree Medical Credits (RMCs). The RMC is a monetary amount provided to the retirees annually to assist with their medical costs. In October 2014, the RMC plan was modified to change the annual cost sharing provisions. Beginning in 2015, the annual RMC amount did not increase and future changes in the amount will be set each year by the company.

The amounts recognized at October 31 in millions of dollars consist of the following:

				Health ar	
	Pe	nsion	S	Life Insu	ırance
	2010	3	2015	2016	2015
Amounts recognized in balance sheet					
Noncurrent asset	\$ 9	4 \$	216		
Current liability	(3	3)	(44)	\$ (32)	\$ (20)
Noncurrent liability	(2,01	0) (	(1,194)	(6,033)	(5,375)
Total	\$(1,94	9) \$(	(1,022)	\$(6,065)	\$(5,395)
Amounts recognized in accumulated other comprehensive income – pretax					
Net actuarial loss	\$ 5,30	9 \$	4,393	\$ 1,865	\$ 1,442
Prior service cost (credit)	6	7	83	(259)	(334)
Total	\$ 5,37	6 \$	4,476	\$ 1,606	\$ 1,108

The total accumulated benefit obligations for all pension plans at October 31, 2016 and 2015 was \$12,410 million and \$11,508 million, respectively.

The accumulated benefit obligations and fair value of plan assets for pension plans with accumulated benefit obligations in excess of plan assets were \$8,402 million and \$7,016 million, respectively, at October 31, 2016 and \$7,254 million and \$6,669 million, respectively, at October 31, 2015. The projected benefit obligations and fair value of plan assets for pension plans with projected benefit obligations in excess of plan assets were \$9,157 million and \$7,114 million, respectively, at October 31, 2016 and \$8,196 million and \$6,958 million, respectively, at October 31, 2015.

The amounts in accumulated other comprehensive income that are expected to be amortized as net expense (income) during fiscal 2017 in millions of dollars follow:

		Health
		Care
		and
		Life
	Pensions	Insurance
Net actuarial loss	\$ 240	\$ 101
Prior service cost (credit)	12	(77)
Total	\$ 252	\$ 24

Actuarial gains and losses are recorded in accumulated other comprehensive income (loss). To the extent unamortized gains and losses exceed 10% of the higher of the market-related value of assets or the benefit obligation, the excess is amortized as a component of net periodic cost over the remaining service period of the active participants. For plans in which all or almost all of the plan's participants are inactive, the amortization period is the remaining life expectancy of the inactive participants.

The company expects to contribute approximately \$59 million to its pension plans and approximately \$38 million to its health care and life insurance plans in 2017, which are primarily direct benefit payments for unfunded plans.

The benefits expected to be paid from the benefit plans, which reflect expected future years of service, are as follows in millions of dollars:

		Health Care and
	Pensions	Life Insurance*
2017	\$ 717	\$ 339
2018	721	353
2019	709	356
2020	707	358
2021	696	362
2022 to 2026	3,454	1,834

\* Net of prescription drug group benefit subsidy under Medicare Part D.

The annual rates of increase in the per capita cost of covered health care benefits (the health care cost trend rates) used to determine accumulated postretirement benefit obligations were based on the trends for medical and prescription drug claims for pre- and post-65 age groups due to the effects of Medicare. At October 31, 2016, the weighted-average composite trend rates for these obligations were assumed to be a 8.3 percent increase from 2016 to 2017, gradually decreasing to 4.8 percent from 2024 to 2025 and all future years. The obligations at October 31, 2015 and the cost in 2016 assumed a .8 percent increase from 2015 to 2016, followed by an increase of 7.9 percent from 2016 to 2017, gradually decreasing to 4.8 percent from 2024 to 2025 and all future years. The small estimated increase from 2015 to 2016 resulted from the transition to the Medicare Advantage plan in January 2016. An increase of one percentage point in the assumed health care cost trend rate would increase the accumulated postretirement benefit obligations by \$876 million and the aggregate of service and interest cost component of net periodic postretirement benefits cost for the year by \$36 million. A decrease of one percentage point would decrease the obligations by \$673 million and the cost by \$28 million.

The discount rate assumptions used to determine the postretirement obligations at October 31, 2016 and 2015 were based on hypothetical AA yield curves represented by a series of annualized individual discount rates. These discount rates represent the rates at which the company's benefit obligations could effectively be settled at the October 31 measurement dates.

Fair value measurement levels in the following tables are defined in Note 26.

The fair values of the pension plan assets at October 31, 2016 follow in millions of dollars:

	Total		Level 2
Cash and short-term investments	\$ 684	\$ 322	\$ 362
Equity:			
U.S. equity securities and			
funds	3,000	2,965	35
International equity securities and			
funds	1,711	1,697	14
Fixed Income:			
Government and agency securities	440	224	216
Corporate debt securities	1,205		1,205
Mortgage-backed securities	39		39
Fixed income funds	20	20	
Real estate	121	118	3
Derivative contracts – assets*	191	3	188
Derivative contracts – liabilities**	(59)	(14)	(45)
Receivables, payables and other	6	5	1
Securities lending collateral	693	108	585
Securities lending liability	(693)	(108)	(585)
Securities sold short	(338)	(333)	<u>(5</u> )
Total of Level 1 and Level 2			
assets	7,020	\$5,007	\$2,013
Investments at net asset value***:			
Short-term investments	216		
U.S. equity funds	30		
International equity funds	595		
Corporate debt funds	25		
Fixed income funds	482		
Real estate	515		
Hedge funds	624		
Private equity/venture			
capital	1,603		
Other investments	27		
Total net assets	\$11,137		

- Includes contracts for interest rates of \$125 million, foreign currency of \$59 million, equity of \$4 million and other of \$3 million.
- Includes contracts for interest rates of \$19 million, foreign currency of \$33 million, equity of \$6 million and other of \$1 million.
- \*\*\* Investments are measured at fair value using the net asset value per share practical expedient, and therefore, are not classified in the fair value hierarchy.

The fair values of the health care assets at October 31, 2016 follow in millions of dollars:

	Total	Level 1	Level 2
Cash and short-term investments	\$ 32	\$ 27	\$ 5
Equity:			
U.S. equity securities and			
funds	138	138	
International equity securities and funds	25	25	
Fixed Income:			
Government and agency securities	43	40	3
Corporate debt securities	30		30
Mortgage-backed securities	11		11
Real estate	2	2	
Derivative contracts – assets*	3		3
Securities lending collateral	48	11	37
Securities lending liability	(48)	(11)	(37)
Securities sold short	(5)	(5)	
Total of Level 1 and Level 2 assets	279	\$227	\$ 52
Investments at net asset value**:			
Short-term investments	3		
International equity funds	60		
Fixed income funds	20		
Real estate funds	7		
Hedge funds	44		
Private equity/venture capital	22		
Total net assets	\$435		

<sup>\*</sup> Includes contracts for interest rates of \$2 million and foreign currency of \$1 million.

The fair values of the pension plan assets at October 31, 2015 follow in millions of dollars:

	T-4-1	114	110
On the send of the set to send the send to	Total		Level 2
Cash and short-term investments	\$ 867	\$ 378	\$ 489
Equity:			
U.S. equity securities and			
funds	3,075		22
International equity securities	1,802	1,781	21
Fixed Income:			
Government and agency securities	386	197	189
Corporate debt securities	751	1	750
Mortgage-backed securities	83		83
Fixed income funds	26	26	
Real estate	133	130	3
Derivative contracts – assets*	190	25	165
Derivative contracts – liabilities**	(26)	, ,	(22)
Receivables, payables and other	4	3	1
Securities lending collateral	745	92	653
Securities lending liability	(745)	(92)	(653)
Securities sold short	(470)	(466)	(4)
Total of Level 1 and Level 2			
assets	6,821	\$5,124	\$1,697
Investments at net asset value***:			
Short-term investments	195		
U.S. equity funds	33		
International equity funds	540		
Corporate debt funds	26		
Fixed income funds	495		
Real estate	501		
Hedge funds	625		
Private equity/venture			
capital	1,604		
Other investments	324		
Total net assets	\$11,164		

<sup>\*</sup> Includes contracts for interest rates of \$137 million, foreign currency of \$17 million, equity of \$30 million and other of \$6 million.

<sup>\*\*</sup> Investments are measured at fair value using the net asset value per share practical expedient, and therefore, are not classified in the fair value hierarchy.

<sup>\*\*</sup> Includes contracts for interest rates of \$7 million, foreign currency of \$15 million and other of \$4 million.

Investments are measured at fair value using the net asset value per share practical expedient, and therefore, are not classified in the fair value hierarchy.

The fair values of the health care assets at October 31, 2015 follow in millions of dollars:

	Total	Level 1	Level 2
Cash and short-term investments	\$ 35	\$ 25	\$ 10
Equity:			
U.S. equity securities and			
funds	229	229	
International equity securities	39	39	
Fixed Income:			
Government and agency securities	84	78	6
Corporate debt securities	35		35
Mortgage-backed securities	13		13
Fixed income funds	1	1	
Real estate	4	4	
Derivative contracts – assets*	4	1	3
Receivables, payables and other	1	1	
Securities lending collateral	65	9	56
Securities lending liability	(65)	(9)	(56)
Securities sold short	(10)	(10)	
Total of Level 1 and Level 2 assets	435	\$368	\$ 67
Investments at net asset value**:			
Short-term investments	4		
International equity funds	103		
Fixed income funds	47		
Real estate funds	10		
Hedge funds	50		
Private equity/venture capital	34		
Other investments	6		
Total net assets	\$689		

- Includes contracts for interest rates of \$2 million, foreign currency of \$1 million and equity of \$1 million.
- \*\* Investments are measured at fair value using the net asset value per share practical expedient, and therefore, are not classified in the fair value hierarchy.

Fair values are determined as follows:

Cash and Short-Term Investments – Includes accounts that are valued based on the account value, which approximates fair value, and investment funds that are valued on the fund's net asset value (NAV) based on the fair value of the underlying securities. Also included are securities that are valued using a market approach (matrix pricing model) in which all significant inputs are observable or can be derived from or corroborated by observable market data.

Equity Securities and Funds – The values are determined primarily by closing prices in the active market in which the equity investment trades, or the fund's NAV, based on the fair value of the underlying securities.

Fixed Income Securities and Funds – The securities are valued using either a market approach (matrix pricing model) in which all significant inputs are observable or can be derived from or corroborated by observable market data such as interest rates, yield curves, volatilities, credit risk and prepayment speeds, or they are valued using the closing prices in the active market in which the fixed income investment trades. Fixed income funds are valued using the NAV, based on the fair value of the underlying securities or closing prices in the active market in which the investment trades.

Real Estate, Venture Capital, Private Equity, Hedge Funds and Other — The investments that are structured as limited partnerships are valued at estimated fair value based on their proportionate share of the limited partnership's fair value

that is determined by the respective general partner. These investments are valued using a combination of NAV, an income approach (primarily estimated cash flows discounted over the expected holding period), or market approach (primarily the valuation of similar securities and properties). Real estate investment trusts are primarily valued at the closing prices in the active markets in which the investment trades. Real estate funds and other investments are primarily valued at NAV, based on the fair value of the underlying securities.

Interest Rate, Foreign Currency and Other Derivative Instruments – The derivatives are valued using either an income approach (discounted cash flow) using market observable inputs, including swap curves and both forward and spot exchange rates, or a market approach (closing prices in the active market in which the derivative instrument trades).

The primary investment objective for the pension and health care plans assets is to maximize the growth of these assets to support the projected obligations to the beneficiaries over a long period of time, and to do so in a manner that is consistent with the company's risk tolerance. The asset allocation policy is the most important decision in managing the assets and it is reviewed regularly. The asset allocation policy considers the company's long-term asset class risk/return expectations since the obligations are long-term in nature. The current target allocations for pension assets are approximately 49 percent for equity securities, 27 percent for debt securities, 5 percent for real estate and 19 percent for other investments. The target allocations for health care assets are approximately 54 percent for equity securities, 29 percent for debt securities, 1 percent for real estate and 16 percent for other investments. The allocation percentages above include the effects of combining derivatives with other investments to manage asset allocations and exposures to interest rates and foreign currency exchange. The assets are well diversified and are managed by professional investment firms as well as by investment professionals who are company employees. As a result of the company's diversified investment policy, there were no significant concentrations of risk.

The expected long-term rate of return on plan assets reflects management's expectations of long-term average rates of return on funds invested to provide for benefits included in the projected benefit obligations. A market related value of plan assets is used to calculate the expected return on assets. The market related value recognizes changes in the fair value of pension plan assets systematically over a five-year period. The market related value of the health care plan assets equal fair value. The expected return is based on the outlook for inflation and for returns in multiple asset classes, while also considering historical returns, asset allocation and investment strategy. The company's approach has emphasized the long-term nature of the return estimate such that the return assumption is not changed significantly unless there are fundamental changes in capital markets that affect the company's expectations for returns over an extended period of time (i.e., 10 to 20 years). The average annual return of the company's U.S. pension fund was approximately 7.1 percent during the past ten years and approximately 8.4 percent during the past 20 years. Since return premiums over inflation and total returns for major asset classes vary widely even over ten-year periods, recent history is not necessarily indicative of long-term future expected returns.

The company's systematic methodology for determining the long-term rate of return for the company's investment strategies supports the long-term expected return assumptions.

The company has created certain Voluntary Employees' Beneficiary Association trusts (VEBAs) for the funding of postretirement health care benefits. The future expected asset returns for these VEBAs are lower than the expected return on the other pension and health care plan assets due to investment in a higher proportion of liquid securities. These assets are in addition to the other postretirement health care plan assets that have been funded under Section 401(h) of the U.S. Internal Revenue Code and maintained in a separate account in the company's pension plan trust.

The company has defined contribution plans related to employee investment and savings plans primarily in the U.S. The company's contributions and costs under these plans were \$193 million in 2016, \$185 million in 2015 and \$184 million in 2014. The contribution rate varies primarily based on the company's performance in the prior year and employee participation in the plans.

#### 8. INCOME TAXES

The provision for income taxes by taxing jurisdiction and by significant component consisted of the following in millions of dollars:

	2	2016		015	2014
Current:					
U.S.:					
Federal	\$	51	\$	377	\$ 1,217
State		26		32	126
Foreign		340		449	564
Total current		417		858	1,907
Deferred:					
U.S.:					
Federal		297		21	(189)
State		11		4	(11)
Foreign		(25)		(43)	(80)
Total deferred		283		(18)	(280)
Provision for income taxes	\$	700	\$	840	\$ 1,627

Based upon the location of the company's operations, the consolidated income before income taxes in the U.S. in 2016, 2015 and 2014 was \$967 million, \$1,838 million and \$3,219 million, respectively, and in foreign countries was \$1,257 million, \$942 million and \$1,578 million, respectively. Certain foreign operations are branches of Deere & Company and are subject to U.S. as well as foreign income tax regulations. The pretax income by location and the preceding analysis of the income tax provision by taxing jurisdiction are not directly related.

A comparison of the statutory and effective income tax provision and reasons for related differences in millions of dollars follow:

	2016		2	2015	2014
U.S. federal income tax provision at a					
statutory rate of 35 percent	\$	778	\$	973	\$ 1,679
Increase (decrease) resulting from:					
State and local income taxes, net of					
federal income tax benefit		26	26 23		75
Differences in taxability of foreign					
(earnings) losses		(107)		(449)	(305)
Nondeductible impairment charges		4			32
Research and business tax credits		(57)		(76)	(99)
Tax rates on foreign earnings		(27)		(36)	(71)
Valuation allowance on deferred taxes		79		384	454
Other – net		4		21	(138)
Provision for income taxes	\$	700	\$	840	\$ 1,627

At October 31, 2016, accumulated earnings in certain subsidiaries outside the U.S. totaled \$5,787 million for which no provision for U.S. income taxes or foreign withholding taxes has been made, because it is expected that such earnings will be reinvested outside the U.S. indefinitely. Determination of the amount of unrecognized deferred tax liability on these unremitted earnings is not practicable. At October 31, 2016, the amount of cash and cash equivalents and marketable securities held by these foreign subsidiaries was \$2,301 million.

Deferred income taxes arise because there are certain items that are treated differently for financial accounting than for income tax reporting purposes. An analysis of the deferred income tax assets and liabilities at October 31 in millions of dollars follows:

		20	16			2015			
		Deferred Tax		eferred Tax		Deferred Tax		eferred Tax	
		Assets	Li	iabilities		Assets	Li	abilities	
Other									
postretirement	_	0.404			_	4.070			
benefit liabilities	\$	2,191			\$	1,972			
Tax over book			\$	578			\$	E7.1	
depreciation Accrual for sales			Ф	5/6			Ф	574	
allowances		592				618			
Lease transactions		592		817		010		528	
Tax loss and tax				017				320	
credit									
carryforwards		661				604			
Foreign unrealized		001				004			
losses		472				458			
Pension liability –									
net		706				315			
Accrual for									
employee									
benefits		133				172			
Share-based									
compensation		152				141			
Goodwill and other									
intangible assets				89				80	
Allowance for credit									
losses		88				72			
Deferred gains on									
distributed foreign		00				00			
earnings Deferred		32				33			
compensation		50				51			
Undistributed		50				31			
foreign earnings				30				25	
Other items		439		175		436		119	
Less valuation		708		173		730		119	
allowances		(1,029)				(940)			
Deferred income	_	(.,==0)	_			(5.0)			
tax assets and									
liabilities	\$	4,487	\$	1,689	\$	3,932	\$	1,326	
	<u> </u>	.,		.,	_	-,	÷	.,	

Deere & Company files a consolidated federal income tax return in the U.S., which includes the wholly-owned financial services subsidiaries. These subsidiaries account for income taxes generally as if they filed separate income tax returns.

At October 31, 2016, certain tax loss and tax credit carryforwards of \$661 million, of which \$60 million are capital losses, were available with \$178 million expiring from 2017 through 2036 and \$483 million with an indefinite carryforward period.

A reconciliation of the total amounts of unrecognized tax benefits at October 31 in millions of dollars follows:

	2016	2015	2014
Beginning of year balance	\$ 229	\$ 213	\$ 272
Increases to tax positions taken during the current year	14	32	28
Increases to tax positions taken during prior years	11	29	20
Decreases to tax positions taken during prior years	(36)	(15)	(84)
Decreases due to lapse of statute of limitations	(7)	(11)	(4)
Settlements	(5)	(6)	` ,
Foreign exchange	(8)	(13)	(19)
End of year balance	\$ 198	\$ 229	\$ 213

The amount of unrecognized tax benefits at October 31, 2016 and 2015 that would affect the effective tax rate if the tax benefits were recognized was \$81 million and \$79 million, respectively. The remaining liability was related to tax positions for which there are offsetting tax receivables, or the uncertainty was only related to timing. The company expects that any reasonably possible change in the amounts of unrecognized tax benefits in the next twelve months would not be significant.

The company files its tax returns according to the tax laws of the jurisdictions in which it operates, which includes the U.S. federal jurisdiction, and various state and foreign jurisdictions. The U.S. Internal Revenue Service has completed the examination of the company's federal income tax returns for periods prior to 2009. The years 2009 through 2014 federal income tax returns are currently under examination. Various state and foreign income tax returns, including major tax jurisdictions in Canada and Germany, also remain subject to examination by taxing authorities.

The company's policy is to recognize interest related to income taxes in interest expense and interest income, and recognize penalties in selling, administrative and general expenses. During 2016, 2015 and 2014, the total amount of expense from interest and penalties was none, \$23 million and \$11 million and the interest income was none, \$3 million and \$4 million, respectively. At October 31, 2016 and 2015, the liability for accrued interest and penalties totaled \$68 million and \$69 million and the receivable for interest was none and \$2 million, respectively.

#### 9. OTHER INCOME AND OTHER OPERATING EXPENSES

The major components of other income and other operating expenses consisted of the following in millions of dollars:

	2	2016		2015		014
Other income						
Revenues from services	\$	270	\$	280	\$	276
Insurance premiums and fees earned		195		173		297
Investment income		16		26		17
Other		265		228		234
Total	\$	746	\$	707	\$	824
Other operating expenses						
Depreciation of equipment on operating						
leases	\$	742	\$	577	\$	494
Insurance claims and expenses		188		183		324
Cost of services		162		160		151
Other		163		41		124
Total	\$1	,255	\$	961	\$ 1	1,093

The company offers extended equipment warranties and, prior to the divestiture of the crop insurance subsidiaries (see Note 4), issued crop insurance policies. To limit losses and reduce exposure to crop insurance claims, the company utilized reinsurance. Although reinsurance contracts permitted recovery of certain claims from reinsurers, the insurance subsidiary was not relieved of its primary obligation to the policyholders. The premiums ceded by the crop insurance subsidiary in 2015 and 2014 were \$54 million and \$288 million, and claims recoveries on the ceded business were \$65 million and \$304 million, respectively. The amounts from reinsurance were netted against the insurance premiums and fees earned and the insurance claims and expenses in the table above.

#### 10. UNCONSOLIDATED AFFILIATED COMPANIES

Unconsolidated affiliated companies are companies in which Deere & Company generally owns 20 percent to 50 percent of the outstanding voting shares. Deere & Company does not control these companies and accounts for its investments in them on the equity basis. The investments in these companies primarily consist of Bell Equipment Limited (32 percent ownership), Deere-Hitachi Construction Machinery Corporation (50 percent ownership), Deere-Hitachi Maquinas de Construcao do Brasil S.A. (50 percent ownership) and SiteOne (24 percent ownership). The unconsolidated affiliated companies primarily manufacture or market equipment and landscapes products. Deere & Company's share of the income or loss of these companies is reported in the consolidated income statement under "Equity in income (loss) of unconsolidated affiliates." The investment in these companies is reported in the consolidated balance sheet under "Investments in unconsolidated affiliates."

Combined financial information of the unconsolidated affiliated companies in millions of dollars follows:

Operations	2016	2015	2014
Sales	\$3,206	\$3,290	\$ 3,082
Net income	30	23	1
Deere & Company's equity in net income			
(loss)	(2)	1	(8)

(continued)

Financial Position	2016	2015
Total assets	\$ 2,201	\$ 2,139
Total external borrowings	909	660
Total net assets	677	878
Deere & Company's share of the net assets	233	303

Consolidated retained earnings at October 31, 2016 include undistributed earnings of the unconsolidated affiliates of \$54 million. Dividends from unconsolidated affiliates were \$64 million in 2016 (see Note 5), \$1 million in 2015 and \$1 million in 2014.

In the ordinary course of business, the company purchases components and finished goods and sells these products to the unconsolidated affiliated companies. Transactions with unconsolidated affiliated companies reported in the statement of consolidated income in millions of dollars follow:

	2016 2015			2014		
Net sales	\$ 45	\$	37	\$	39	
Purchases	1,016		1,284		1,415	

#### 11. MARKETABLE SECURITIES

All marketable securities are classified as available-for-sale, with unrealized gains and losses shown as a component of stockholders' equity. Realized gains or losses from the sales of marketable securities are based on the specific identification method.

The amortized cost and fair value of marketable securities at October 31 in millions of dollars follow:

	Amortized Cost		Uni	Gross Unrealized Gains		Gross Unrealized Losses		Fair /alue
2016								
Equity fund	\$	40	\$	5			\$	45
Fixed income fund		15						15
U.S. government debt securities		85		3				88
Municipal debt securities Corporate debt		41		2				43
securities		113		5				118
International debt securities		39			\$	5		34
Mortgage-backed securities*		109		2				111
Marketable	<b>C</b>	440	Φ.	47	Φ.		Φ.	454
securities	\$	442	\$	17	\$	5	\$	454
2015	_			_				
Equity fund	\$	38	\$	5			\$	43
U.S. government debt securities		79		3				82
Municipal debt securities		29		2				31
Corporate debt securities		121		4	\$	1		124
International debt securities		48				1		47
Mortgage-backed securities*		108		3		1		110
Marketable securities	\$	423	\$	17	\$	3	\$	437

<sup>\*</sup> Primarily issued by U.S. government sponsored enterprises.

The contractual maturities of debt securities at October 31, 2016 in millions of dollars follow:

	Amortized Cost	Fair Value
Due in one year or less	\$ 35	\$ 34
Due after one through five years	104	103
Due after five through 10 years	87	91
Due after 10 years	52	55
Mortgage-backed securities	109	111
Debt securities	\$ 387	\$ 394

Actual maturities may differ from contractual maturities because some securities may be called or prepaid. Because of the potential for prepayment on mortgage-backed securities, they are not categorized by contractual maturity. Proceeds from the sales of available-for-sale securities were \$62 million in 2016, \$120 million in 2015 and \$6 million in 2014. Realized gains, realized losses, the increase (decrease) in net unrealized gains or losses and unrealized losses that have been continuous for over twelve months were not significant in 2016, 2015 and 2014. Unrealized losses at October 31, 2016 and 2015 were primarily the result of an increase in interest rates and were not recognized in income due to the ability and intent to hold to maturity. There were no significant impairment write-downs in the periods reported.

#### 12. RECEIVABLES

#### **Trade Accounts and Notes Receivable**

Trade accounts and notes receivable at October 31 consisted of the following in millions of dollars:

	2016	2015
Trade accounts and notes:		
Agriculture and turf	\$2,438	\$2,278
Construction and forestry	573	773
Trade accounts and notes receivable - net	\$3,011	\$3,051

At October 31, 2016 and 2015, dealer notes included in the previous table were \$143 million and \$90 million, and the allowance for credit losses was \$50 million and \$41 million, respectively.

The equipment operations sell a significant portion of their trade receivables to financial services and provide compensation to these operations at approximate market rates of interest.

Trade accounts and notes receivable primarily arise from sales of goods to independent dealers. Under the terms of the sales to dealers, interest is primarily charged to dealers on outstanding balances, from the earlier of the date when goods are sold to retail customers by the dealer or the expiration of certain interest-free periods granted at the time of the sale to the dealer, until payment is received by the company. Dealers cannot cancel purchases after the equipment is shipped and are responsible for payment even if the equipment is not sold to retail customers. The interest-free periods are determined based on the type of equipment sold and the time of year of the sale. These periods range from one to twelve months for most equipment. Interest-free periods may not be extended. Interest charged may not be forgiven and the past due interest rates exceed market rates. The company evaluates and assesses

dealers on an ongoing basis as to their creditworthiness and generally retains a security interest in the goods associated with the trade receivables. The company is obligated to repurchase goods sold to a dealer upon cancellation or termination of the dealer's contract for such causes as change in ownership and closeout of the business.

Trade accounts and notes receivable have significant concentrations of credit risk in the agriculture and turf sector and construction and forestry sector as shown in the previous table. On a geographic basis, there is not a disproportionate concentration of credit risk in any area.

#### Financing Receivables

Financing receivables at October 31 consisted of the following in millions of dollars:

		201	6		2015				
	l	Jnrestricted (	l/Se	curitized	٦	Jnrestricted (	l/Se	curitized	
Retail notes:									
Agriculture and turf	\$	14,152	\$	4,615	\$	15,359	\$	4,236	
Construction and									
forestry		2,201		620		2,086		686	
Total		16,353		5,235		17,445		4,922	
Wholesale notes		3,971				4,269			
Revolving charge									
accounts		3,135				2,740			
Financing leases									
(direct and sales-									
type)		1,326				1,333			
Total financing									
receivables		24,785		5,235		25,787		4,922	
Less:									
Unearned finance									
income:									
Retail notes		812		94		726		74	
Financing leases		109				108			
Total		921		94		834		74	
Allowance for credit	_		_		_		_		
losses		162		14		144		13	
Financing	_		_		_	····			
receivables – net	\$	23,702	\$	5,127	\$	24,809	\$	4,835	

The residual values for investments in financing leases at October 31, 2016 and 2015 totaled \$156 million and \$115 million, respectively.

Financing receivables have significant concentrations of credit risk in the agriculture and turf sector and construction and forestry sector as shown in the previous table. On a geographic basis, there is not a disproportionate concentration of credit risk in any area. The company generally retains as collateral a security interest in the equipment associated with retail notes, wholesale notes and financing leases.

Financing receivables at October 31 related to the company's sales of equipment that were included in the table above consisted of the following in millions of dollars:

	 2016 restricted	 2015 nrestricted
Retail notes*:		
Agriculture and turf	\$ 1,896	\$ 1,792
Construction and forestry	336	356
Total	 2,232	2,148
Wholesale notes	3,971	4,269
Sales-type leases	648	690
Total	6,851	7,107
Less:		
Unearned finance income:		
Retail notes	202	178
Sales-type leases	42	45
Total	244	223
Financing receivables related to the		
company's sales of equipment	\$ 6,607	\$ 6,884

\* These retail notes generally arise from sales of equipment by company-owned dealers or through direct sales.

Financing receivable installments, including unearned finance income, at October 31 are scheduled as follows in millions of dollars:

	2016				201	5	
	Unrestricted/Securitized				Unrestricted	d/Sec	curitized
Due in months:							
0 – 12	\$ 12,835	\$	2,269	\$	13,006	\$	2,057
13 – 24	4,760		1,536		4,987		1,418
25 - 36	3,386		931		3,719		921
37 – 48	2,219		408		2,444		426
49 – 60	1,181		84		1,283		95
Thereafter	404		7		348		5
Total	\$ 24,785	\$	5,235	\$	25,787	\$	4,922

The maximum terms for retail notes are generally seven years for agriculture and turf equipment and five years for construction and forestry equipment. The maximum term for financing leases is generally five years, while the average term for wholesale notes is less than twelve months.

At October 31, 2016 and 2015, the unpaid balances of receivables administered but not owned were \$15 million and \$22 million, respectively. At October 31, 2016 and 2015, worldwide financing receivables administered, which include financing receivables administered but not owned, totaled \$28,844 million and \$29,666 million, respectively.

Past due balances of financing receivables still accruing finance income represent the total balance held (principal plus accrued interest) with any payment amounts 30 days or more past the contractual payment due date. Non-performing financing receivables represent loans for which the company has ceased accruing finance income. These receivables are generally 120 days delinquent and the estimated uncollectible amount, after charging the dealer's withholding account, has been written off to the allowance for credit losses. Finance income for non-performing receivables is recognized on a cash basis.

Accrual of finance income is generally resumed when the receivable becomes contractually current and collections are reasonably assured.

An age analysis of past due financing receivables that are still accruing interest and non-performing financing receivables at October 31 follows in millions of dollars:

	30-59 Days Past Due		Days Past		90 Days or Greater Past Due		Total Past Due
2016							
Retail Notes:							
Agriculture and turf	\$ 115	\$	57	\$	65	\$	237
Construction and forestry	78		32		25		135
Other:							
Agriculture and turf	26		11		6		43
Construction and forestry	10		5		4		19
Total	\$ 229	\$	105	\$	100	\$	434

		Total Past Due	F	Total Non- Performing	Current		Total Financing eceivables		
Retail Notes:									
Agriculture and turf	\$	237	\$	191	\$ 17,526	\$	17,954		
Construction and forestry		135		35	2,558		2,728		
Other:									
Agriculture and turf		43		9	7,286		7,338		
Construction and forestry		19		9	957		985		
Total	\$	434	\$	244	\$ 28,327		29,005		
Less allowance for o	rec	dit loss	es				176		
Total financing receivables – net \$ 28,829									

	30-59 Days Past Due	60-89 Days Past Due	90 Days or Greater Past Due		Total Past Due
2015					
Retail Notes:					
Agriculture and turf	\$ 112	\$ 54	\$ 47	\$	213
Construction and forestry	64	29	12		105
Other:					
Agriculture and turf	26	12	4		42
Construction and forestry	13	5	3		21
Total	\$ 215	\$ 100	\$ 66	\$	381

		Total Past Due	Pe	Total Non- rforming	Current	Total inancing eceivables
Retail Notes:						
Agriculture and turf	\$	213	\$	98	\$ 18,574	\$ 18,885
Construction and forestry		105		21	2,556	2,682
Other:						
Agriculture and turf		42		13	7,175	7,230
Construction and forestry		21		10	973	1,004
Total	\$	381	\$	142	\$ 29,278	29,801
Less allowance for o	red	lit loss	es			157
Total financing rec	eiva	ables -	– net			\$ 29.644

An analysis of the allowance for credit losses and investment in financing receivables follows in millions of dollars:

-	-	Retail lotes	(	evolving Charge ccounts		ther		Total
2016		,						
Allowance:								
Beginning of year balance	\$	95	\$	40	\$	22	\$	157
Provision		43		36		5		84
Write-offs		(43)		(55)		(5)		(103)
Recoveries		11		19		1		31
Translation adjustments		7						<u>7</u>
End of year balance*	\$	113	\$	40	\$	23	\$	176
Financing receivables:								
End of year balance	\$20	0,682	\$	3,135	\$5	,188	\$2	9,005
Balance individually								
evaluated	\$	108	\$	8	\$	20	\$	136
2015					_			
Allowance:								
Beginning of year balance	\$	109	\$	41	\$	25	\$	175
Provision		22		21		3		46
Write-offs		(26)		(37)		(4)		(67)
Recoveries		10		15		1		26
Translation adjustments		(20)				(3)		(23)
End of year balance*	\$	95	\$	40	\$	22	\$	157
Financing receivables:								
End of year balance	\$2	1,567	\$	2,740	\$5	,494	\$2	9,801
Balance individually								
evaluated	\$	40			\$	6	\$	46
2014	<u> </u>				<u>-</u>	Ť	<u>-</u>	
Allowance:								
Beginning of year balance	\$	101	\$	41	\$	31	\$	173
Provision	Ψ	18	Ψ	11	Ψ	2	Ψ	31
Write-offs		(16)		(26)		(7)		(49)
Recoveries		11		15		(- )		26
Translation adjustments		(5)				(1)		(6)
End of year balance*	\$	109	\$	41	\$	25	\$	175
Financing receivables:	_		_		_		_	
End of year balance	\$22	2,784	\$	2,603	\$6	,812	\$3	2,199
Balance individually	<u> </u>	_,. • .	<u> </u>	,	==	,	==	_,
evaluated	\$	26			\$	1	\$	27
Craidated	Ψ		_		Ψ		Ψ	

\* Individual allowances were not significant.

Past-due amounts over 30 days represented 1.50 percent and 1.28 percent of the receivables financed at October 31, 2016 and 2015, respectively. The allowance for credit losses represented .61 percent and .53 percent of financing receivables outstanding at October 31, 2016 and 2015, respectively. In addition, at October 31, 2016 and 2015, the company's financial services operations had \$162 million and \$179 million, respectively, of deposits primarily withheld from dealers and merchants available for potential credit losses.

Financing receivables are considered impaired when it is probable the company will be unable to collect all amounts due according to the contractual terms. Receivables reviewed for impairment generally include those that are either past due, or have provided bankruptcy notification, or require significant collection efforts. Receivables, which are impaired, are generally classified as non-performing.

An analysis of the impaired financing receivables at October 31 follows in millions of dollars:

	_			paid	_		_	rage
		orded				cific		orded
	Inves	tment	Bal	ance	Allow	ance	Inves	stment
2016*								
Receivables with								
specific allowance**	\$	31	\$	28	\$	9	\$	29
Receivables without a								
specific allowance***		29		27				26
Total	\$	60	\$	55	\$	9	\$	55
Agriculture and turf	\$	33	\$	30	\$	8	\$	27
Construction and forestry	<b></b>	27	\$	25	\$	1	\$	 28
2015*								
Receivables with								
specific allowance**	\$	14	\$	13	\$	2	\$	13
Receivables without a								
specific allowance***		14		14				20
Total	\$	28	\$	27	\$	2	\$	33
Agriculture and turf	\$	19	\$	18	\$	2	\$	20
Construction and								
forestry	\$	9	\$	9			\$	13

- \* Finance income recognized was not material.
- \*\* Primarily retail notes.
- \*\*\* Primarily retail notes and wholesale receivables.

A troubled debt restructuring is generally the modification of debt in which a creditor grants a concession it would not otherwise consider to a debtor that is experiencing financial difficulties. These modifications may include a reduction of the stated interest rate, an extension of the maturity dates, a reduction of the face amount or maturity amount of the debt, or a reduction of accrued interest. During 2016, 2015 and 2014, the company identified 167, 107 and 66 financing receivable contracts, primarily wholesale receivables and retail notes, as troubled debt restructurings with aggregate balances of \$19 million, \$8 million and \$3 million pre-modification and \$18 million, \$7 million and \$2 million post-modification, respectively. During these same periods, there were no significant troubled debt restructurings that subsequently defaulted and were written off. At October 31, 2016, the company had commitments to lend approximately \$21 million to borrowers whose accounts were modified in troubled debt restructurings.

## Other Receivables

Other receivables at October 31 consisted of the following in millions of dollars:

	2016					
Taxes receivable	\$ 702	\$	720			
Other	317		271			
Other receivables	\$ 1,019	\$	991			

## 13. SECURITIZATION OF FINANCING RECEIVABLES

The company, as a part of its overall funding strategy, periodically transfers certain financing receivables (retail notes) into variable interest entities (VIEs) that are special purpose

entities (SPEs), or non-VIE banking operations, as part of its asset-backed securities programs (securitizations). The structure of these transactions is such that the transfer of the retail notes did not meet the accounting criteria for sales of receivables, and is, therefore, accounted for as a secured borrowing. SPEs utilized in securitizations of retail notes differ from other entities included in the company's consolidated statements because the assets they hold are legally isolated. Use of the assets held by the SPEs or the non-VIEs is restricted by terms of the documents governing the securitization transactions.

In these securitizations, the retail notes are transferred to certain SPEs or to non-VIE banking operations, which in turn issue debt to investors. The debt securities issued to the third party investors result in secured borrowings, which are recorded as "Short-term securitization borrowings" on the consolidated balance sheet. The securitized retail notes are recorded as "Financing receivables securitized - net" on the balance sheet. The total restricted assets on the balance sheet related to these securitizations include the financing receivables securitized less an allowance for credit losses, and other assets primarily representing restricted cash. For those securitizations in which retail notes are transferred into SPEs, the SPEs supporting the secured borrowings are consolidated unless the company does not have both the power to direct the activities that most significantly impact the SPEs' economic performance and the obligation to absorb losses or the right to receive benefits that could potentially be significant to the SPEs. No additional support to these SPEs beyond what was previously contractually required has been provided during the reporting periods.

In certain securitizations, the company consolidates the SPEs since it has both the power to direct the activities that most significantly impact the SPEs' economic performance through its role as servicer of all the receivables held by the SPEs, and the obligation through variable interests in the SPEs to absorb losses or receive benefits that could potentially be significant to the SPEs. The restricted assets (retail notes securitized, allowance for credit losses and other assets) of the consolidated SPEs totaled \$2,718 million and \$3,006 million at October 31, 2016 and 2015, respectively. The liabilities (short-term securitization borrowings and accrued interest) of these SPEs totaled \$2.660 million and \$2.743 million at October 31, 2016 and 2015. respectively. In the fourth quarter of 2015, as part of a receivable transfer, the company retained \$228 million of securitization borrowings, with no balance at October 31, 2016 and \$189 million at October 31, 2015. This amount is not shown as a liability above as the borrowing is not outstanding to a third party. The credit holders of these SPEs do not have legal recourse to the company's general credit.

In certain securitizations, the company transfers retail notes to non-VIE banking operations, which are not consolidated since the company does not have a controlling interest in the entities. The company's carrying values and interests related to the securitizations with the unconsolidated non-VIEs were restricted assets (retail notes securitized, allowance for credit losses and other assets) of \$663 million and \$249 million at October 31, 2016 and 2015, respectively. The liabilities (short-term securitization borrowings and accrued interest) were \$616 million and \$238 million at October 31, 2016 and 2015, respectively.

In certain securitizations, the company transfers retail notes into bank-sponsored, multi-seller, commercial paper conduits, which are SPEs that are not consolidated. The company does not service a significant portion of the conduits' receivables, and therefore, does not have the power to direct the activities that most significantly impact the conduits' economic performance. These conduits provide a funding source to the company (as well as other transferors into the conduit) as they fund the retail notes through the issuance of commercial paper. The company's carrying values and variable interest related to these conduits were restricted assets (retail notes securitized, allowance for credit losses and other assets) of \$1,861 million and \$1,689 million at October 31, 2016 and 2015, respectively. The liabilities (short-term securitization borrowings and accrued interest) related to these conduits were \$1,729 million and \$1,611 million at October 31, 2016 and 2015, respectively.

The company's carrying amount of the liabilities to the unconsolidated conduits, compared to the maximum exposure to loss related to these conduits, which would only be incurred in the event of a complete loss on the restricted assets, was as follows at October 31 in millions of dollars:

	2016
Carrying value of liabilities	\$ 1,729
Maximum exposure to loss	1,861

The total assets of unconsolidated VIEs related to securitizations were approximately \$41 billion at October 31, 2016.

The components of consolidated restricted assets related to secured borrowings in securitization transactions at October 31 were as follows in millions of dollars:

	2016	2015
Financing receivables securitized (retail notes)	\$ 5,141	\$4,848
Allowance for credit losses	(14)	(13)
Other assets	115	109
Total restricted securitized assets	\$5,242	\$4,944

The components of consolidated secured borrowings and other liabilities related to securitizations at October 31 were as follows in millions of dollars:

	2016	2015
Short-term securitization borrowings	\$5,003	\$4,590
Accrued interest on borrowings	2	2
Total liabilities related to restricted		
securitized assets	\$5,005	\$4,592

The secured borrowings related to these restricted securitized retail notes are obligations that are payable as the retail notes are liquidated. Repayment of the secured borrowings depends primarily on cash flows generated by the restricted assets. Due to the company's short-term credit rating, cash collections from these restricted assets are not required to be placed into a segregated collection account until immediately prior to the time payment is required to the secured creditors. At October 31,

2016, the maximum remaining term of all securitized retail notes was approximately six years.

## 14. EQUIPMENT ON OPERATING LEASES

Operating leases arise primarily from the leasing of John Deere equipment to retail customers. Initial lease terms generally range from 12 to 60 months. Net equipment on operating leases at October 31 consisted of the following in millions of dollars:

	2016	2015
Equipment on operating leases:		
Agriculture and turf	\$ 4,758	\$ 3,909
Construction and forestry	1,144	1,061
Equipment on operating leases - net	\$ 5,902	\$ 4,970

The equipment is depreciated on a straight-line basis over the terms of the lease. The accumulated depreciation on this equipment was \$1,054 million and \$793 million at October 31, 2016 and 2015, respectively. The corresponding depreciation expense was \$742 million in 2016, \$577 million in 2015 and \$494 million in 2014.

Future payments to be received on operating leases totaled \$1,868 million at October 31, 2016 and are scheduled in millions of dollars as follows: 2017 – \$827, 2018 – \$549, 2019 – \$303, 2020 – \$153 and 2021 – \$36.

At October 31, 2016 and 2015, the company's financial services operations had \$68 million and \$30 million, respectively, of deposits withheld from dealers available for potential losses on residual values.

#### 15. INVENTORIES

Most inventories owned by Deere & Company and its U.S. equipment subsidiaries are valued at cost, on the "last-in, first-out" (LIFO) basis. Remaining inventories are generally valued at the lower of cost, on the "first-in, first-out" (FIFO) basis, or market. The value of gross inventories on the LIFO basis represented 61 percent and 66 percent of worldwide gross inventories at FIFO value at October 31, 2016 and 2015, respectively. The pretax favorable income effects from the liquidation of LIFO inventory during 2016 and 2015 were approximately \$4 million and \$22 million, respectively. If all inventories had been valued on a FIFO basis, estimated inventories by major classification at October 31 in millions of dollars would have been as follows:

	2016	2015
Raw materials and supplies	\$ 1,369	\$ 1,559
Work-in-process	453	450
Finished goods and parts	2,976	3,234
Total FIFO value	4,798	5,243
Less adjustment to LIFO value	1,457	1,426
Inventories	\$ 3,341	\$ 3,817

#### 16. PROPERTY AND DEPRECIATION

A summary of property and equipment at October 31 in millions of dollars follows:

	Useful Lives*		
	(Years)	2016	2015
Equipment Operations			
Land			\$ 114
Buildings and building equipment	23	3,230	3,016
Machinery and equipment	11	5,180	5,055
Dies, patterns, tools, etc.	8	1,604	1,567
All other	5	893	875
Construction in progress		370	345
Total at cost		11,396	10,972
Less accumulated depreciation		6,277	5,846
Total		5,119	5,126
Financial Services			
Land		4	4
Buildings and building equipment	26	73	73
All other	6	36	36
Total at cost		113	113
Less accumulated depreciation		61	58
Total		52	55
Property and equipment-net		\$5,171	\$5,181

\* Weighted-averages

Total property and equipment additions in 2016, 2015 and 2014 were \$674 million, \$666 million and \$1,016 million and depreciation was \$701 million, \$692 million and \$696 million, respectively. Capitalized interest was \$3 million, \$6 million and \$6 million in the same periods, respectively. The cost of leased property and equipment under capital leases of \$33 million and \$27 million and accumulated depreciation of \$16 million and \$14 million at October 31, 2016 and 2015, respectively, is included in property and equipment.

Capitalized software has an estimated useful life of three years. The amounts of total capitalized software costs, including purchased and internally developed software, classified as "Other Assets" at October 31, 2016 and 2015 were \$1,035 million and \$934 million, less accumulated amortization of \$770 million and \$681 million, respectively. Capitalized interest on software was \$3 million and \$2 million at October 31, 2016 and 2015, respectively. Amortization of these software costs in 2016, 2015, and 2014 was \$102 million, \$103 million and \$106 million, respectively. The cost of leased software assets under capital leases amounting to \$90 million and \$86 million at October 31, 2016 and 2015, respectively, is included in other assets.

The cost of compliance with foreseeable environmental requirements has been accrued and did not have a material effect on the company's consolidated financial statements.

## 17. GOODWILL AND OTHER INTANGIBLE ASSETS - NET

The changes in amounts of goodwill by operating segments were as follows in millions of dollars:

	Agriculture	Construction	1
	and	and	
	Turf	Forestry	Total
Goodwill at October 31, 2014	\$ 235	\$ 556	\$791
Translation adjustments and other	(8)	(57)	(65)
Goodwill at October 31, 2015	227	499	726
Acquisitions*	95		95
Translation adjustments and other	1	(6)	(5)
Goodwill at October 31, 2016	\$ 323	\$ 493	\$816

\* See Note 4

There were no accumulated impairment losses in the reported periods.

The components of other intangible assets are as follows in millions of dollars:

	Useful Lives* (Years)	2016 2015
Amortized intangible assets:		_
Customer lists and relationships	11	\$ 42 \$ 23
Technology, patents, trademarks and other	15	131 96
Total at cost		173 119
Less accumulated amortization**		69 55
Other intangible assets - net		\$104 \$ 64

Weighted-averages

Other intangible assets are stated at cost less accumulated amortization. The amortization of other intangible assets in 2016, 2015 and 2014 was \$15 million, \$10 million and \$11 million, respectively. The estimated amortization expense for the next five years is as follows in millions of dollars: 2017 - \$18, 2018 - \$14, 2019 - \$13, 2020 - \$10 and 2021 - \$8.

<sup>\*\*</sup> Accumulated amortization at 2016 and 2015 for customer lists and relationships was \$11 million and \$10 million and technology, patents, trademarks and other was \$58 million and \$45 million, respectively.

#### 18. TOTAL SHORT-TERM BORROWINGS

Total short-term borrowings at October 31 consisted of the following in millions of dollars:

	2016		2016 2	
Equipment Operations				
Commercial paper			\$	225
Notes payable to banks	\$	164		154
Long-term borrowings due within one year		85		86
Total		249		465
Financial Services				
Commercial paper		1,253		2,743
Notes payable to banks		151		52
Long-term borrowings due within one year*	;	5,259		5,167
Total	(	6,663		7,962
Short-term borrowings	(	6,912		8,427
Financial Services				_
Short-term securitization borrowings	;	5,003		4,590
Total short-term borrowings	\$ 1	1,915	\$ 1	3,017

<sup>\*</sup> Includes unamortized fair value adjustments related to interest rate swaps.

The short-term securitization borrowings for financial services are secured by financing receivables (retail notes) on the balance sheet (see Note 13). Although these securitization borrowings are classified as short-term since payment is required if the retail notes are liquidated early, the payment schedule for these borrowings of \$5,003 million at October 31, 2016 based on the expected liquidation of the retail notes in millions of dollars is as follows: 2017 – \$2,727, 2018 – \$1,474, 2019 – \$663, 2020 – \$112, 2021 – \$25 and 2022 – \$2.

The weighted-average interest rates on total short-term borrowings, excluding current maturities of long-term borrowings, at October 31, 2016 and 2015 were 1.6 percent and .9 percent, respectively.

Lines of credit available from U.S. and foreign banks were \$7,315 million at October 31, 2016. At October 31, 2016, \$5,747 million of these worldwide lines of credit were unused. For the purpose of computing the unused credit lines, commercial paper and short-term bank borrowings, excluding secured borrowings and the current portion of long-term borrowings, were primarily considered to constitute utilization. Included in the above lines of credit were long-term credit facility agreements for \$2,900 million, expiring in April 2020, and \$2,900 million, expiring in April 2021. The agreements are mutually extendable and the annual facility fees are not significant. These credit agreements require Capital Corporation to maintain its consolidated ratio of earnings to fixed charges at not less than 1.05 to 1 for each fiscal quarter and the ratio of senior debt, excluding securitization indebtedness, to capital base (total subordinated debt and stockholder's equity excluding accumulated other comprehensive income (loss)) at not more than 11 to 1 at the end of any fiscal quarter. The credit agreements also require the equipment operations to maintain a ratio of total debt to total capital (total debt and stockholders' equity excluding accumulated other comprehensive income (loss)) of 65 percent or less at the end of each fiscal quarter. Under this provision, the company's excess equity capacity and retained earnings balance free of restriction at October 31, 2016 was \$9,553 million. Alternatively under this provision, the

equipment operations had the capacity to incur additional debt of \$17,742 million at October 31, 2016. All of these requirements of the credit agreements have been met during the periods included in the consolidated financial statements.

Deere & Company has an agreement with Capital Corporation pursuant to which it has agreed to continue to own, directly or through one or more wholly-owned subsidiaries, at least 51 percent of the voting shares of capital stock of Capital Corporation and to maintain Capital Corporation's consolidated tangible net worth at not less than \$50 million. This agreement also obligates Deere & Company to make payments to Capital Corporation such that its consolidated ratio of earnings to fixed charges is not less than 1.05 to 1 for each fiscal quarter. Deere & Company's obligations to make payments to Capital Corporation under the agreement are independent of whether Capital Corporation is in default on its indebtedness, obligations or other liabilities. Further, Deere & Company's obligations under the agreement are not measured by the amount of Capital Corporation's indebtedness, obligations or other liabilities. Deere & Company's obligations to make payments under this agreement are expressly stated not to be a guaranty of any specific indebtedness, obligation or liability of Capital Corporation and are enforceable only by or in the name of Capital Corporation. No payments were required under this agreement during the periods included in the consolidated financial statements.

#### 19. ACCOUNTS PAYABLE AND ACCRUED EXPENSES

Accounts payable and accrued expenses at October 31 consisted of the following in millions of dollars:

	2016	2015
Equipment Operations		
Accounts payable:		
Trade payables	\$1,598	\$1,435
Dividends payable	189	193
Other	193	186
Accrued expenses:		
Dealer sales discounts	1,371	1,423
Employee benefits	861	1,122
Product warranties	779	807
Unearned revenue	401	379
Other	1,269	1,256
Total	6,661	6,801
Financial Services		
Accounts payable:		
Deposits withheld from dealers and merchants	230	179
Other	268	258
Accrued expenses:		
Unearned revenue	735	671
Accrued interest	125	111
Employee benefits	52	71
Other	185	221
Total	1,595	1,511
Eliminations*	1,016	1,001
Accounts payable and accrued expenses	\$7,240	\$7,311

Primarily trade receivable valuation accounts which are reclassified as accrued expenses by the equipment operations as a result of their trade receivables being sold to financial services.

#### 20. LONG-TERM BORROWINGS

Long-term borrowings at October 31 consisted of the following in millions of dollars:

	2	016	- 2	2015
Equipment Operations				
Notes and debentures:				
4.375% notes due 2019	\$		\$	750
8-1/2% debentures due 2022		105		105
2.60% notes due 2022		1,000		1,000
6.55% debentures due 2028		200		200
5.375% notes due 2029		500		500
8.10% debentures due 2030		250		250
7.125% notes due 2031		300		300
3.90% notes due 2042		1,250		1,250
Other notes		231		106
Total		4,586		4,461
Financial Services				
Notes and debentures:				
Medium-term notes due 2017 - 2026: (principal \$17,203 - 2016, \$17,610 - 2015) Average				
interest rates of 1.7% - 2016, 1.4% - 2015	1	7,434*	1	7,857*
2.75% senior note due 2022: (\$500 principal) Swapped \$500 to variable interest rate of				
1.6% - 2016, 1.1% - 2015		519*		512*
Other notes		1,221		1,003
Total	1	9,174	1	9,372
Long-term borrowings**	\$2	3,760	\$2	23,833
	_		_	

- \* Includes unamortized fair value adjustments related to interest rate swaps.
- \*\* All interest rates are as of year end.

The approximate principal amounts of the equipment operations' long-term borrowings maturing in each of the next five years in millions of dollars are as follows: 2017 - \$85, 2018 - \$113, 2019 - \$842, 2020 - \$30 and 2021 - \$2. The approximate principal amounts of the financial services' long-term borrowings maturing in each of the next five years in millions of dollars are as follows: 2017 - \$5, 258, 2018 - \$5, 270, 2019 - \$4, 911, 2020 - \$2, 968 and 2021 - \$2, 148.

#### 21. LEASES

At October 31, 2016, future minimum lease payments under capital leases amounted to \$34 million as follows: 2017 - \$18, 2018 - \$7, 2019 - \$4, 2020 - \$3, 2021 - \$1 and later years \$1. Total rental expense for operating leases was \$185 million in 2016, \$200 million in 2015 and \$205 million in 2014. At October 31, 2016, future minimum lease payments under operating leases amounted to \$392 million as follows: 2017 - \$101, 2018 - \$77, 2019 - \$60, 2020 - \$48, 2021 - \$38 and later years \$68.

## 22. COMMITMENTS AND CONTINGENCIES

The company generally determines its warranty liability by applying historical claims rate experience to the estimated amount of equipment that has been sold and is still under warranty based on dealer inventories and retail sales. The

historical claims rate is primarily determined by a review of five-year claims costs and current quality developments.

The premiums for the company's extended warranties are primarily recognized in income in proportion to the costs expected to be incurred over the contract period. The unamortized extended warranty premiums (unearned revenue) included in the following table totaled \$447 million and \$454 million at October 31, 2016 and 2015, respectively.

A reconciliation of the changes in the warranty liability and unearned premiums in millions of dollars follows:

	Warranty Unearned	
	2016	2015
Beginning of year balance	\$1,261	\$1,234
Payments	(783)	(779)
Amortization of premiums received	(202)	(161)
Accruals for warranties	758	810
Premiums received	181	209
Foreign exchange	11	(52)
End of year balance	\$1,226	\$1,261

At October 31, 2016, the company had approximately \$152 million of guarantees issued primarily to banks outside the U.S. related to third-party receivables for the retail financing of John Deere equipment. The company may recover a portion of any required payments incurred under these agreements from repossession of the equipment collateralizing the receivables. At October 31, 2016, the company had accrued losses of approximately \$4 million under these agreements. The maximum remaining term of the receivables guaranteed at October 31, 2016 was approximately four years.

At October 31, 2016, the company had commitments of approximately \$138 million for the construction and acquisition of property and equipment. At October 31, 2016, the company also had pledged or restricted assets of \$117 million, primarily as collateral for borrowings and restricted other assets. In addition, see Note 13 for restricted assets associated with borrowings related to securitizations.

The company also had other miscellaneous contingencies totaling approximately \$65 million at October 31, 2016, for which it believes the probability for payment is substantially remote. The accrued liability for these contingencies was not material at October 31, 2016.

The company is subject to various unresolved legal actions which arise in the normal course of its business, the most prevalent of which relate to product liability (including asbestos related liability), retail credit, employment, software licensing, patent, trademark and environmental matters. The company believes the reasonably possible range of losses for these unresolved legal actions in addition to the amounts accrued would not have a material effect on its financial statements.

## 23. CAPITAL STOCK

Changes in the common stock account in millions were as follows:

	Number of		
	Shares Issued		Amount
Balance at October 31, 2013	536.4	\$	3,524
Stock options and other			151
Balance at October 31, 2014	536.4		3,675
Stock options and other			151
Balance at October 31, 2015	536.4	_	3,826
Stock options and other			86
Balance at October 31, 2016	536.4	\$	3,912

The number of common shares the company is authorized to issue is 1,200 million. The number of authorized preferred shares, none of which has been issued, is nine million.

The Board of Directors at its meeting in December 2013 authorized the repurchase of up to \$8,000 million of common stock (91.8 million shares based on the fiscal year end closing common stock price of \$87.17 per share). At the end of the fiscal year, this repurchase program had \$3,260 million (37.4 million shares at the same price) remaining to be repurchased. Repurchases of the company's common stock under this plan will be made from time to time, at the company's discretion, in the open market.

A reconciliation of basic and diluted net income per share attributable to Deere & Company follows in millions, except per share amounts:

	2016	2015	2014
Net income attributable to			
Deere & Company	\$1,523.9	\$1,940.0	\$3,161.7
Less income allocable to			
participating securities	7	8.	1.0
Income allocable to common stock	\$1,523.2	\$1,939.2	\$3,160.7
Average shares outstanding	315.2 333.6		363.0
Basic per share	\$ 4.83	\$ 5.81	\$ 8.71
Average shares outstanding	315.2	333.6	363.0
Effect of dilutive stock options	1.4	2.4	3.1
Total potential shares			
outstanding	316.6	336.0	366.1
Diluted per share	\$ 4.81	\$ 5.77	\$ 8.63

All stock options outstanding were included in the computation during 2016, 2015 and 2014, except 9.9 million in 2016 and 2.4 million in 2014 that had an antidilutive effect under the treasury stock method.

#### 24. STOCK OPTION AND RESTRICTED STOCK AWARDS

The company issues stock options and restricted stock awards to key employees under plans approved by stockholders. Restricted stock is also issued to nonemployee directors for their services as directors under a plan approved by stockholders. Options are awarded with the exercise price equal to the market price and become exercisable in one to three years after grant. Options expire ten years after the date of grant. Restricted stock awards generally vest after three years. The compensation cost for stock

options, service based restricted stock units and market/service based restricted stock units, which is based on the fair value at the grant date, is recognized on a straight-line basis over the requisite period the employee is required to render service. The compensation cost for performance/service based units, which is based on the fair value at the grant date, is recognized over the employees' requisite service period and periodically adjusted for the probable number of shares to be awarded. According to these plans at October 31, 2016, the company is authorized to grant an additional 13.2 million shares related to stock options or restricted stock.

The fair value of each option award was estimated on the date of grant using a binomial lattice option valuation model. Expected volatilities are based on implied volatilities from traded call options on the company's stock. The expected volatilities are constructed from the following three components: the starting implied volatility of short-term call options traded within a few days of the valuation date; the predicted implied volatility of long-term call options; and the trend in implied volatilities over the span of the call options' time to maturity. The company uses historical data to estimate option exercise behavior and employee termination within the valuation model. The expected term of options granted is derived from the output of the option valuation model and represents the period of time that options granted are expected to be outstanding. The risk-free rates utilized for periods throughout the contractual life of the options are based on U.S. Treasury security yields at the time of grant.

The assumptions used for the binomial lattice model to determine the fair value of options follow:

	2016	2015	2014
Risk-free interest rate	.23% - 2.3%	.04% - 2.3%	.03% - 2.9%
Expected dividends	2.8%	2.5%	2.3%
	25.2% –	23.4% -	25.9% -
Expected volatility	29.0%	25.7%	32.0%
Weighted-average			
volatility	26.5%	25.6%	31.9%
Expected term (in			
years)	7.0 - 8.6	7.2 - 8.2	7.3 - 7.4

Stock option activity at October 31, 2016 and changes during 2016 in millions of dollars and shares follow:

	Shares	Exercise Price*	Remaining Contractual Term (Years)	Aggregate Intrinsic Value
Outstanding at beginning of year	14.8	\$ 77.39	, ,	
Granted	3.5	79.24		
Exercised	(.7)	51.98		
Expired or forfeited	(.1)	82.95		
Outstanding at end of year	17.5	78.73	6.10	\$ 153.0
Exercisable at end of year	11.8	76.75	4.90	126.6

\* Weighted-averages

The weighted-average grant-date fair values of options granted during 2016, 2015 and 2014 were \$16.88, \$19.67 and \$24.74, respectively. The total intrinsic values of options exercised during 2016, 2015 and 2014 were \$23 million, \$98 million and \$125 million, respectively. During 2016, 2015 and 2014, cash received from stock option exercises was \$36 million,

\$172 million and \$149 million with tax benefits of \$8 million, \$36 million and \$46 million, respectively.

The company granted 255 thousand, 248 thousand and 236 thousand restricted stock units to employees and nonemployee directors in 2016, 2015 and 2014, of which 113 thousand, 122 thousand and 102 thousand are subject to service based only conditions, 71 thousand, 63 thousand and 67 thousand are subject to performance/service based conditions, 71 thousand, 63 thousand and 67 thousand are subject to market/service based conditions, respectively. The service based only units award one share of common stock for each unit at the end of the vesting period and include dividend equivalent payments.

The performance/service based units are subject to a performance metric based on the company's compound annual revenue growth rate, compared to a benchmark group of companies over the vesting period. The market/service based units are subject to a market related metric based on total shareholder return, compared to the same benchmark group of companies over the vesting period. The performance/service based units and the market/service based units both award common stock in a range of zero to 200 percent for each unit granted based on the level of the metric achieved and do not include dividend equivalent payments over the vesting period. The weighted-average fair values of the service based only units at the grant dates during 2016, 2015 and 2014 were \$79.84, \$88.66 and \$87.16 per unit, respectively, based on the market price of a share of underlying common stock. The fair value of the performance/service based units at the grant date during 2016, 2015 and 2014 were \$72.93, \$81.78 and \$81.53 per unit, respectively, based on the market price of a share of underlying common stock excluding dividends. The fair value of the market/service based units at the grant date during 2016, 2015 and 2014 were \$103.66, \$113.97 and \$116.86 per unit, respectively, based on a lattice valuation model excluding dividends.

The company's nonvested restricted shares at October 31, 2016 and changes during 2016 in millions of shares follow:

		Grant-Date
	Shares	Fair Value*
Service based only		
Nonvested at beginning of year	.3	\$ 87.58
Granted	.1	79.84
Vested	(.1)	87.12
Nonvested at end of year	.3	84.86
Performance/service and market/service based		
Nonvested at beginning of year	.4	\$ 96.87
Granted	.1	88.30
Expired or forfeited	(.1)	93.69
Nonvested at end of year	.4	94.88

Weighted-averages

During 2016, 2015 and 2014, the total share-based compensation expense was \$71 million, \$66 million and \$79 million, respectively, with recognized income tax benefits of \$26 million, \$25 million and \$29 million, respectively. At October 31, 2016, there was \$47 million of total unrecognized compensation cost from share-based compensation arrangements granted under the plans, which is related to nonvested shares. This compensation is expected to be recognized over a weighted-average period of approximately two years. The total grant-date fair values of stock options and restricted shares vested during 2016, 2015 and 2014 were \$69 million, \$74 million and \$69 million, respectively.

The company currently uses shares that have been repurchased through its stock repurchase programs to satisfy share option exercises. At fiscal year end, the company had 222 million shares in treasury stock and 37 million shares remaining to be repurchased under its current publicly announced repurchase program (see Note 23).

#### 25. OTHER COMPREHENSIVE INCOME ITEMS

The after-tax changes in accumulated other comprehensive income at October 31 in millions of dollars follow:

			Unrealized		Total
			Gain	Unrealized	Accumulated
	Retirement	Cumulative	(Loss)	Gain (Loss)	Other
	Benefits	Translation	on	on	Comprehensive
	Adjustment	Adjustment	Derivatives Investme		Income (Loss)
2013	\$(2,809)	\$ 113	\$ (3)	\$ 6	\$(2,693)
Period					
Change	(684)	(416)	3	7	(1,090)
2014	(3,493)	(303)		13	(3,783)
Period					
Change	(8)	(935)	(2)	(1)	(946)
2015	(3,501)	(1,238)	(2)	12	(4,729)
Period	,	, í	, ,		, ,
Change	(908)	9	3	(1)	(897)
2016	\$(4,409)	\$(1,229)	\$ 1	\$ 11	\$(5,626)

Following are amounts recorded in and reclassifications out of other comprehensive income (loss), and the income tax effects, in millions of dollars:

2016	Before Tax Amount	Tax (Expense) Credit	After Tax Amount
Cumulative translation adjustment	\$ 8	\$ 1	\$ 9
Unrealized gain (loss) on derivatives:	Ψ 0	Ψ 1	Ψ 3
Unrealized hedging gain (loss)	(2)	1	(1)
Reclassification of realized (gain) loss	(~)		(1)
to:			
Interest rate contracts – Interest			
expense	7	(2)	5
Foreign exchange contracts – Other		` '	
operating expenses	(1)		(1)
Net unrealized gain (loss) on			
derivatives	4	(1)	3
Unrealized gain (loss) on investments:			
Unrealized holding gain (loss)	2		2
Reclassification of realized (gain)			
loss – Other income	(4)	1	(3)
Net unrealized gain (loss) on			
investments	(2)	1	(1)
Retirement benefits adjustment:			
Pensions			
Net actuarial gain (loss) and prior			
service credit (cost)	(1,141)	397	(744)
Reclassification through			
amortization of actuarial (gain)			
loss and prior service (credit) cost			
to net income:*			
Actuarial (gain)	044	(77)	404
loss	211	(77)	134
Prior service (credit) cost	16	(0)	10
Settlements/curtailments	14	(6) (4)	10
Health care and life insurance	14	(4)	10
Net actuarial gain (loss) and prior			
service credit (cost)	(493)	178	(315)
Reclassification through	(400)	170	(010)
amortization of actuarial (gain)			
loss and prior service (credit) cost			
to net income:*			
Actuarial (gain)			
loss	73	(27)	46
Prior service (credit)		` ,	
cost	(78)	29	(49)
Net unrealized gain (loss) on			
retirement benefits adjustment	(1,398)	490	(908)
Total other comprehensive income			
(loss)	\$(1,388)	\$ 491	\$ (897)

<sup>\*</sup> These accumulated other comprehensive income amounts are included in net periodic postretirement costs. See Note 7 for additional detail.

2015	Before Tax Tax (Expense) Amount Credit		
Cumulative translation adjustment	\$ (938)	\$ 3	\$ (935)
Unrealized gain (loss) on derivatives: Unrealized hedging gain (loss) Reclassification of realized (gain) loss to:	(12)	4	(8)
Interest rate contracts – Interest expense	12	(4)	8
Foreign exchange contracts – Other operating expenses	(4)	2	(2)
Net unrealized gain (loss) on	<u> </u>		<u>(Z</u> )
derivatives	(4)	2	(2)
Unrealized gain (loss) on investments:			
Unrealized holding gain (loss) Reclassification of realized (gain)	12	(4)	8
loss – Other income	(14)	5	(9)
Net unrealized gain (loss) on			
investments	(2)	1	<u>(1</u> )
Retirement benefits adjustment: Pensions			
Net actuarial gain (loss) and prior service credit (cost) Reclassification through amortization of actuarial (gain) loss and prior service (credit) cost to net income:*	(427)	151	(276)
Actuarial (gain)	223	(81)	142
Prior service (credit) cost Settlements/curtailments	25 11	(9) (4)	16 7
Health care and life insurance		(1)	•
Net actuarial gain (loss) and prior service credit (cost) Reclassification through amortization of actuarial (gain) loss and prior service (credit) cost to net income:*	145	(52)	93
Actuarial (gain) loss	91	(34)	57
Prior service (credit) cost	(77)	29	(48)
Settlements/curtailments	1		1
Net unrealized gain (loss) on retirement benefits adjustment	(8)		(8)
Total other comprehensive income (loss)	\$ (952)	\$ 6	\$ (946)

These accumulated other comprehensive income amounts are included in net periodic postretirement costs. See Note 7 for additional detail.

	Before	Tax	After
	Tax Amount	(Expense) Credit	Tax Amount
2014	Amount	Credit	Amount
Cumulative translation adjustment:			
Unrealized gain (loss) on			
translation adjustment	\$ (427)	\$ 2	\$ (425)
Reclassification of (gain) loss to Other		¥ -	Ψ ( : <b>_</b> 0)
operating expenses*	9		9
Net unrealized gain (loss) on			
translation adjustment	(418)	2	(416)
Unrealized gain (loss) on derivatives:			
Unrealized hedging gain (loss)	(14)	5	(9)
Reclassification of realized (gain) loss			
to:			
Interest rate contracts – Interest			
expense	13	(5)	8
Foreign exchange contracts – Other			
operating expenses	6	(2)	4
Net unrealized gain (loss) on			
derivatives	5	(2)	3
Unrealized gain (loss) on investments:			
Unrealized holding gain (loss)	10	(3)	7
Net unrealized gain (loss) on		(0)	_
investments	10	(3)	7
Retirement benefits adjustment:			
Pensions			
Net actuarial gain	(040)	242	(507)
(loss) Reclassification through	(940)	343	(597)
amortization of actuarial (gain)			
loss and prior service (credit) cost			
to net income:**			
Actuarial (gain)			
loss	177	(64)	113
Prior service (credit)		(- /	
cost	25	(9)	16
Settlements/curtailments	9	(3)	6
Health care and life insurance			
Net actuarial gain (loss) and prior			
service credit (cost)	(378)	138	(240)
Reclassification through			
amortization of actuarial (gain)			
loss and prior service (credit) cost			
to net income:**			
Actuarial (gain) loss	33	(12)	21
Prior service (credit)	33	(12)	21
cost	(3)	1	(2)
Settlements/curtailments	(1)		(1)
Net unrealized gain (loss) on	(1)		(')
retirement benefits adjustment	(1,078)	394	(684)
Total other comprehensive income	(1,070)		(00-1)
(loss)	\$(1,481)	\$ 391	\$(1,090)
(1000)	<del>Ψ(1, 401</del> )	Ψ 001	Ψ(1,000)

- \* Represents the accumulated translation adjustments related to the foreign subsidiaries of the Water operations that were sold (see Note 4).
- \*\* These accumulated other comprehensive income amounts are included in net periodic postretirement costs. See Note 7 for additional detail.

The noncontrolling interests' comprehensive income (loss) was \$(2.4) million in 2016, \$.5 million in 2015 and \$1.3 million in 2014, which consisted of net income (loss) of \$(2.4) million in 2016, \$.9 million in 2015 and \$1.6 million in 2014 and cumulative translation adjustments of none in 2016, \$(.4) million in 2015 and \$(.3) million in 2014.

## **26. FAIR VALUE MEASUREMENTS**

Fair value is defined as the price that would be received to sell an asset or paid to transfer a liability in an orderly transaction between market participants at the measurement date. To determine fair value, the company uses various methods including market and income approaches. The company utilizes valuation models and techniques that maximize the use of observable inputs. The models are industry-standard models that consider various assumptions including time values and yield curves as well as other economic measures. These valuation techniques are consistently applied.

Level 1 measurements consist of quoted prices in active markets for identical assets or liabilities. Level 2 measurements include significant other observable inputs such as quoted prices for similar assets or liabilities in active markets; identical assets or liabilities in inactive markets; observable inputs such as interest rates and yield curves; and other market-corroborated inputs. Level 3 measurements include significant unobservable inputs.

The fair values of financial instruments that do not approximate the carrying values at October 31 in millions of dollars follow:

			_							
	_	201	6		_	201	5			
	(	Carrying	Fair		(	Carrying		Carrying		Fair
		Value		Value* Value		alue* Value		√alue*		
Financing receivables -										
net	\$	23,702	\$	23,564	\$	24,809	\$2	24,719		
Financing receivables securitized – net	<u>-</u>	E 107	<u>-</u>	E 111	Φ.	4 025		4 000		
	\$	5,127	Φ	5,114	\$	4,835	Φ	4,820		
Short-term securitization borrowings	\$	5,003	\$	5,005	\$	4,590	\$	4,590		
Long-term borrowings due within one year:	_						_			
Equipment operations	\$	85	\$	80	\$	86	\$	78		
Financial services		5,259		5,259		5,167		5,167		
Total	\$	5,344	\$	5,339	\$	5,253	\$	5,245		
Long-term borrowings:			_				_	-		
Equipment operations	\$	4,586	\$	5,184	\$	4,461	\$	4,835		
Financial services		19,174		19,273		19,372	•	19,348		
Total	\$	23,760	\$	24,457	\$	23,833	\$2	24,183		
			_		_					

\* Fair value measurements above were Level 3 for all financing receivables and Level 2 for all borrowings.

Fair values of the financing receivables that were issued long-term were based on the discounted values of their related cash flows at interest rates currently being offered by the company for similar financing receivables. The fair values of the remaining financing receivables approximated the carrying amounts.

Fair values of long-term borrowings and short-term securitization borrowings were based on current market quotes for identical or similar borrowings and credit risk, or on the discounted values of their related cash flows at current market interest rates. Certain long-term borrowings have been swapped to current variable interest rates. The carrying values of these long-term borrowings included adjustments related to fair value hedges.

Assets and liabilities measured at October 31 at fair value on a recurring basis in millions of dollars follow:

	2016*		2	015*
Marketable securities				
Equity fund	\$	45	\$	43
Fixed income fund		15		
U.S. government debt securities		88		82
Municipal debt securities		43		31
Corporate debt securities		118		124
International debt securities		34		47
Mortgage-backed securities**		111		110
Total marketable securities		454		437
Other assets				
Derivatives:				
Interest rate contracts		294		353
Foreign exchange contracts		60		50
Cross-currency interest rate contracts		21		25
Total assets***	\$	829	\$	865
Accounts payable and accrued expenses				-
Derivatives:				
Interest rate contracts	\$	29	\$	60
Foreign exchange contracts		43		18
Total liabilities	\$	72	\$	78

- All measurements above were Level 2 measurements except for Level 1 measurements of U.S. government debt securities of \$53 million and \$37 million at October 31, 2016 and 2015, respectively, and the equity fund of \$45 million and \$43 million at October 31, 2016 and 2015, respectively, and the fixed income fund of \$15 million at October 31, 2016. In addition, \$28 million and \$29 million of the international debt securities were Level 3 measurements at October 31, 2016 and 2015, respectively. There were no transfers between Level 1 and Level 2 during 2016 and 2015.
- \*\* Primarily issued by U.S. government sponsored enterprises
- \*\*\* Excluded from this table were cash equivalents, which were carried at cost that approximates fair value. The cash equivalents consist primarily of money market funds that were Level 1 measurements.

Fair value, recurring, Level 3 measurements from available-for-sale marketable securities at October 31 in millions of dollars follow:

	20	16	2	2015
Beginning of period balance	\$	29		
Purchases		25	\$	30
Principal payments		(22)		
Change in unrealized gain (loss)		(4)		(1)
End of period balance	\$	28	\$	29

Fair value, nonrecurring, Level 3 measurements from impairments at October 31 in millions of dollars follow:

	Fair \	/alue*		_osses*	
	2016	2015	2016	2015 2	2014
Equipment on operating leases – net	\$ 654	\$ 479	\$ 31	\$ 10	
Property and equipment – net	\$ 31	\$ 33	\$ 13	\$ 10	44
Investments in unconsolidated affiliates	\$ 1		\$ 12		
Other assets	\$ 184	\$ 112	\$ 29	\$ 15	16
Assets held for sale – Water operations				\$	36

\* See financing receivables with specific allowances in Note 12 that were not significant. See Note 5 for impairments.

The following is a description of the valuation methodologies the company uses to measure certain financial instruments on the balance sheet and nonmonetary assets at fair value:

Marketable Securities – The portfolio of investments, except for the Level 3 measurement international debt securities, is primarily valued on a market approach (matrix pricing model) in which all significant inputs are observable or can be derived from or corroborated by observable market data such as interest rates, yield curves, volatilities, credit risk and prepayment speeds. Funds are primarily valued using the fund's net asset value, based on the fair value of the underlying securities. The Level 3 measurement international debt securities are primarily valued using an income approach based on discounted cash flows using yield curves derived from limited, observable market data.

Derivatives – The company's derivative financial instruments consist of interest rate swaps and caps, foreign currency futures, forwards and swaps, and cross-currency interest rate swaps. The portfolio is valued based on an income approach (discounted cash flow) using market observable inputs, including swap curves and both forward and spot exchange rates for currencies.

Financing Receivables – Specific reserve impairments are based on the fair value of the collateral, which is measured using a market approach (appraisal values or realizable values). Inputs include a selection of realizable values (see Note 12).

Equipment on Operating Leases-Net – The impairments are based on an income approach (discounted cash flow), using the contractual payments, plus an estimate of equipment sale price at lease maturity. Inputs include realized sales values (see Note 5).

Property and Equipment-Net – The impairments are measured at the lower of the carrying amount, or fair value. The valuations were based on a cost approach. The inputs include replacement cost estimates adjusted for physical deterioration and economic obsolescence (see Note 5).

Investment in Unconsolidated Affiliates – Other than temporary impairments for investments are measured as the difference between the implied fair value and the carrying value of the investments. The estimated fair value is determined by an income approach (discounted cash flows), which includes inputs such as interest rates and margins (see Note 5).

Other Assets – The impairments are measured at the lower of the carrying amount, or fair value. The valuations were based on a market approach. The inputs include sales of comparable assets (see Note 5).

Assets Held For Sale-Water Operations – The impairment of the disposal group was measured at the lower of carrying amount, or fair value less cost to sell. Fair value was based on the probable sale price. The inputs included estimates of the final sale price (see Note 5).

#### **27. DERIVATIVE INSTRUMENTS**

#### **Cash Flow Hedges**

Certain interest rate and cross-currency interest rate contracts (swaps) were designated as hedges of future cash flows from borrowings. The total notional amounts of the receive-variable/pay-fixed interest rate contracts at October 31, 2016 and 2015 were \$1,600 million and \$2,800 million, respectively. The total notional amounts of the crosscurrency interest rate contracts were \$42 million and \$60 million at October 31, 2016 and 2015, respectively. The effective portions of the fair value gains or losses on these cash flow hedges were recorded in other comprehensive income (OCI) and subsequently reclassified into interest expense or other operating expenses (foreign exchange) in the same periods during which the hedged transactions affected earnings. These amounts offset the effects of interest rate or foreign currency exchange rate changes on the related borrowings. Any ineffective portions of the gains or losses on all cash flow interest rate contracts designated as cash flow hedges were recognized currently in interest expense or other operating expenses (foreign exchange) and were not material during any years presented. The cash flows from these contracts were recorded in operating activities in the statement of consolidated cash flows.

The amount of loss recorded in OCI at October 31, 2016 that is expected to be reclassified to interest expense or other operating expenses in the next twelve months if interest rates or exchange rates remain unchanged is approximately \$1 million after-tax. These contracts mature in up to 26 months. There were no gains or losses reclassified from OCI to earnings based on the probability that the original forecasted transaction would not occur.

#### Fair Value Hedges

Certain interest rate contracts (swaps) were designated as fair value hedges of borrowings. The total notional amounts of the receive-fixed/pay-variable interest rate contracts at October 31, 2016 and 2015 were \$8,844 million and \$8,618 million, respectively. The effective portions of the fair value gains or losses on these contracts were offset by fair value gains or

losses on the hedged items (fixed-rate borrowings). Any ineffective portions of the gains or losses were recognized currently in interest expense. The ineffective portions were a loss of \$2 million and gain of \$2 million in 2016 and 2015, respectively. The cash flows from these contracts were recorded in operating activities in the statement of consolidated cash flows.

The gains (losses) on these contracts and the underlying borrowings recorded in interest expense follow in millions of dollars:

	20	16	2	2015
Interest rate contracts*	\$	7	\$	104
Borrowings**		(9)		(102)

- Includes changes in fair values of interest rate contracts excluding net accrued interest income of \$146 million and \$173 million during 2016 and 2015, respectively.
- \*\* Includes adjustments for fair values of hedged borrowings excluding accrued interest expense of \$290 million and \$274 million during 2016 and 2015, respectively.

## **Derivatives Not Designated as Hedging Instruments**

The company has certain interest rate contracts (swaps and caps). foreign exchange contracts (futures, forwards and swaps) and crosscurrency interest rate contracts (swaps), which were not formally designated as hedges. These derivatives were held as economic hedges for underlying interest rate or foreign currency exposures primarily for certain borrowings and purchases or sales of inventory. The total notional amounts of the interest rate swaps at October 31, 2016 and 2015 were \$6,060 million and \$6,333 million, the foreign exchange contracts were \$3,919 million and \$3,160 million and the cross-currency interest rate contracts were \$63 million and \$76 million, respectively. At October 31, 2016 and 2015, there were also \$579 million and \$1,069 million, respectively, of interest rate caps purchased and the same amounts sold at the same capped interest rate to facilitate borrowings through securitization of retail notes. The fair value gains or losses from the interest rate contracts were recognized currently in interest expense and the gains or losses from foreign exchange contracts in cost of sales or other operating expenses, generally offsetting over time the expenses on the exposures being hedged. The cash flows from these non-designated contracts were recorded in operating activities in the statement of consolidated cash flows

Fair values of derivative instruments in the consolidated balance sheet at October 31 in millions of dollars follow:

	2	016	2	015
Other Assets				
Designated as hedging instruments:				
Interest rate contracts	\$	268	\$	299
Cross-currency interest rate contracts		11		14
Total designated		279		313
Not designated as hedging instruments:				,
Interest rate contracts		26		54
Foreign exchange contracts		60		50
Cross-currency interest rate contracts		10		11
Total not designated		96		115
Total derivative assets	\$	375	\$	428
Accounts Payable and Accrued Expenses				
Designated as hedging instruments:				
Interest rate contracts	\$	10	\$	8
Total designated		10		8
Not designated as hedging instruments:				
Interest rate contracts		19		52
Foreign exchange contracts		43		18
Total not designated		62		70
Total derivative liabilities	\$	72	\$	78

The classification and gains (losses) including accrued interest expense related to derivative instruments on the statement of consolidated income consisted of the following in millions of dollars:

	2	016	2	015	2	014
Fair Value Hedges						
Interest rate contracts – Interest expense	\$	153	\$	277	\$	155
Cash Flow Hedges						
Recognized in OCI						
(Effective Portion):						
Interest rate contracts – OCI (pretax)*		(3)		(16)		(10)
Foreign exchange contracts – OCI (pretax)*		1		4		(4)
Reclassified from OCI						
(Effective Portion):						
Interest rate contracts – Interest expense*		(7)		(12)		(13)
Foreign exchange contracts – Other						
expense*		1		4		(6)
D : 10: 11:1						
Recognized Directly in Income		**		**		**
(Ineffective Portion)		^^		^^		^^
Not Books and an Hadron						
Not Designated as Hedges	•	(4)	•	(47)	•	•
Interest rate contracts – Interest expense*	\$	(1)	\$	(17)	\$	3
Foreign exchange contracts – Cost of sales		(15)		97		25
Foreign exchange contracts – Other		7.		004		70
expense*	_	74	_	304	_	79
Total not designated	\$	58	\$	384	\$	107

- \* Includes interest and foreign exchange gains (losses) from cross-currency interest rate contracts.
- \*\* The amounts are not significant.

#### **Counterparty Risk and Collateral**

Certain of the company's derivative agreements contain credit support provisions that may require the company to post collateral based on the size of the net liability positions and credit ratings. The aggregate fair value of all derivatives with credit-risk-related contingent features that were in a net liability

position at October 31, 2016 and October 31, 2015, was \$29 million and \$41 million, respectively. The company, due to its credit rating and amounts of net liability position, has not posted any collateral. If the credit-risk-related contingent features were triggered, the company would be required to post collateral up to an amount equal to this liability position, prior to considering applicable netting provisions.

Derivative instruments are subject to significant concentrations of credit risk to the banking sector. The company manages individual counterparty exposure by setting limits that consider the credit rating of the counterparty, the credit default swap spread of the counterparty and other financial commitments and exposures between the company and the counterparty banks. All interest rate derivatives are transacted under International Swaps and Derivatives Association (ISDA) documentation. Some of these agreements include credit support provisions. Each master agreement permits the net settlement of amounts owed in the event of default or termination.

Derivatives are recorded without offsetting for netting arrangements or collateral. The impact on the derivative assets and liabilities related to netting arrangements and any collateral received or paid at October 31 in millions of dollars follows:

	Gross	Amounts	Ne	etting	Colla	ateral	Net	t
	Reco	gnized	Arrang	gements	Rec	eived	Amou	unt
2016								
Assets	\$	375	\$	(32)	\$	(6)	\$ 33	37
Liabilities		72		(32)			4	10
2015				` ′				
Assets	\$	428	\$	(62)			\$ 36	6
Liabilities		78		(62)			1	16

# 28. SEGMENT AND GEOGRAPHIC AREA DATA FOR THE YEARS ENDED OCTOBER 31, 2016, 2015 AND 2014

The company's operations are presently organized and reported in three major business segments described as follows:

The agriculture and turf segment primarily manufactures and distributes a full line of agriculture and turf equipment and related service parts – including large, medium and utility tractors; loaders; combines, cotton pickers, cotton strippers, and sugarcane harvesters; related front-end harvesting equipment; sugarcane loaders and pull-behind scrapers; tillage, seeding and application equipment, including sprayers, nutrient management and soil preparation machinery; hay and forage equipment, including self-propelled forage harvesters and attachments, balers and mowers; turf and utility equipment, including riding lawn equipment and walk-behind mowers, golf course equipment, utility vehicles, and commercial mowing equipment, along with a broad line of associated implements; integrated agricultural management systems technology and solutions; and other outdoor power products.

The construction and forestry segment primarily manufactures and distributes a broad range of machines and service parts used in construction, earthmoving, material handling and timber harvesting – including backhoe loaders; crawler dozers and loaders; four-wheel-drive loaders; excavators; motor graders; articulated dump trucks; landscape loaders; skid-steer loaders; and log skidders, feller bunchers, log loaders, log forwarders, log harvesters and related attachments.

The products and services produced by the segments above are marketed primarily through independent retail dealer networks and major retail outlets.

The financial services segment primarily finances sales and leases by John Deere dealers of new and used agriculture and turf equipment and construction and forestry equipment. In addition, the financial services segment provides wholesale financing to dealers of the foregoing equipment, finances retail revolving charge accounts and offers extended equipment warranties.

Because of integrated manufacturing operations and common administrative and marketing support, a substantial number of allocations must be made to determine operating segment and geographic area data. Intersegment sales and revenues represent sales of components and finance charges, which are generally based on market prices.

Information relating to operations by operating segment in millions of dollars follows. In addition to the following unaffiliated sales and revenues by segment, intersegment sales and revenues in 2016, 2015 and 2014 were as follows: agriculture and turf net sales of \$31 million, \$49 million and \$89 million, construction and forestry net sales of \$1 million, \$1 million and \$1 million, and financial services revenues of \$225 million, \$225 million and \$228 million, respectively.

OPERATING SEGMENTS	2016	2015	2014
Net sales and revenues			
Unaffiliated customers:			
Agriculture and turf net sales	\$18,487	\$19,812	\$26,380
Construction and forestry net sales	4,900	5,963	6,581
Total net sales	23,387	25,775	32,961
Financial services revenues	2,694	2,591	2,577
Other revenues*	563	497	529
Total	\$26,644	\$28,863	\$36,067

Other revenues are primarily the equipment operations' revenues for finance and interest income, and other income as disclosed in Note 31, net of certain intercompany eliminations.

Operating profit			
Agriculture and turf	\$ 1,700	\$ 1,649	\$ 3,649
Construction and forestry	180	528	648
Financial services*	709	963	921
Total operating profit	2,589	3,140	5,218
Interest income	48	61	57
Investment income			2
Interest expense	(251)	(273)	(289)
Foreign exchange gains (losses) from equipment operations' financing			
activities	(12)	13	(2)
Corporate expenses – net	(153)	(160)	(196)
Income taxes	(700)	(840)	(1,627)
Total	(1,068)	(1,199)	(2,055)
Net income	1,521	1,941	3,163
Less: Net income (loss) attributable to noncontrolling interests	(3)	1	1
Net income attributable to Deere & Company	\$ 1,524	\$ 1,940	\$ 3,162

\* Operating profit of the financial services business segment includes the effect of its interest expense and foreign exchange gains or losses.

OPERATING SEGMENTS	2	2016 2		2015	2014
Interest income*					
Agriculture and turf	\$	12	\$	14	\$ 17
Construction and forestry		1		2	1
Financial services		1,650		1,687	1,754
Corporate		48		61	57
Intercompany		(240)		(253)	(268)
Total	\$	1,471	\$	1,511	\$ 1,561

Does not include finance rental income for equipment on operating leases.

Interest expense			
Agriculture and turf	\$ 173	\$ 160	\$ 175
Construction and forestry	44	45	37
Financial services	536	455	431
Corporate	251	273	289
Intercompany	(240)	(253)	(268)
Total	\$ 764	\$ 680	\$ 664
Depreciation* and amortization			
expense			
Agriculture and turf	\$ 667	\$ 659	\$ 681
Construction and forestry	136	133	115
Financial services	757	590	511
Total	\$ 1,560	\$ 1,382	\$ 1,307

\* Includes depreciation for equipment on operating leases.

\$	9	\$	7	\$	8
	(13)		(7)		(18)
	2		1		2
\$	(2)	\$	1	\$	(8)
¢	0.405	¢	0 222	<b>ው</b>	0.440
\$	8,405	\$	8,332		9,442
\$	8,405 3,017	\$	8,332 3,295		9,442 3,405
		_	,		
	3,017	_	3,295		3,405
	\$	(13)	(13)	(13) (7) <u>2</u> <u>1</u>	(13) (7) 2 1

Corporate assets are primarily the equipment operations' retirement benefits, deferred income tax assets, marketable securities and cash and cash equivalents as disclosed in Note 31, net of certain intercompany eliminations.

Capital additions			
Agriculture and turf	\$ 556	\$ 522	\$ 868
Construction and forestry	115	138	145
Financial services	3	6	3
Total	\$ 674	\$ 666	\$ 1,016
Investments in unconcelled to d			
Investments in unconsolidated			
Investments in unconsolidated affiliates			
affiliates Agriculture and turf	\$ 56	\$ 116	\$ 110
affiliates	\$ 56 165	\$ 116 177	\$ 110 182
affiliates Agriculture and turf	\$ 	\$ -	\$ 

The company views and has historically disclosed its operations as consisting of two geographic areas, the U.S. and Canada, and outside the U.S. and Canada, shown below in millions of dollars. No individual foreign country's net sales and revenues were material for disclosure purposes.

GEOGRAPHIC AREAS	2016	2015	2014
Net sales and revenues			
Unaffiliated customers:			
U.S. and Canada:			
Equipment operations net sales			
(88%)*	\$14,376	\$16,498	\$20,171
Financial services revenues (79%)			
*	2,366	2,252	2,220
Total	16,742	18,750	22,391
Outside U.S. and Canada:			
Equipment operations net sales	9,011	9,277	12,790
Financial services revenues	328	339	357
Total	9,339	9,616	13,147
Other revenues	563	497	529
Total	\$26,644	\$28,863	\$36,067

\* The percentages indicate the approximate proportion of each amount that relates to the U.S. only and are based upon a three-year average for 2016, 2015 and 2014.

Operating profit			
U.S. and Canada:			
Equipment operations	\$ 1,305	\$ 1,643	\$ 3,311
Financial services	551	802	727
Total	1,856	2,445	4,038
Outside U.S. and Canada:			<del></del>
Equipment operations	575	534	986
Financial services	158	161	194
Total	733	695	1,180
Total	\$ 2,589	\$ 3,140	\$ 5,218
Property and equipment			
U.S.	\$ 3,077	\$ 3,098	\$ 3,154
Germany	569	568	640
Other countries	1,525	1,515	1,784
Total	\$ 5,171	\$ 5,181	\$ 5,578

## 29. SUPPLEMENTAL INFORMATION (UNAUDITED)

Common stock per share sales prices from New York Stock Exchange composite transactions quotations follow:

		First		Second		Third		Fourth		
	(	Quarter		r Quarter		Quarter Quarte		Quarter		Quarter
2016 Market price										
High	\$	80.19	\$	85.68	\$	87.48	\$	88.09		
Low	\$	71.78	\$	74.58	\$	77.71	\$	76.83		
2015 Market price										
High	\$	90.85	\$	92.75	\$	97.33	\$	97.14		
Low	\$	84.55	\$	86.64	\$	88.98	\$	72.89		

At October 31, 2016, there were 22,711 holders of record of the company's \$1 par value common stock.

Quarterly information with respect to net sales and revenues and earnings is shown in the following schedule. The company's

fiscal year ends in October and its interim periods (quarters) end in January, April and July. Such information is shown in millions of dollars except for per share amounts.

ond Third Quarter  875 \$ 6,724 \$ 6,520 107 5,861 5,650 575 1,367 1,267
875 \$ 6,724 \$ 6,520 107 5,861 5,650
107 5,861 5,650
107 5,861 5,650
575 1,367 1,267
733 705 435
496 489 285
1.57 1.55 .91
1.56 1.55 .90
.60 .60 .60
.60 .60 .60
171 \$ 7,594 \$ 6,715
399 6,839 5,932
704 1,482 1,262
017 738 457
690 512 351
2.05 1.54 1.09
2.03 1.53 1.08
.60 .60 .60
.60 .60 .60
111

Net income per share for each quarter must be computed independently. As a result, their sum may not equal the total net income per share for the year.

\* See Note 5 for "Special Items."

## **30. SUBSEQUENT EVENTS**

A quarterly dividend of \$.60 per share was declared at the Board of Directors meeting on December 7, 2016, payable on February 1, 2017 to stockholders of record on December 30, 2016.

During the fourth quarter of 2016, the company announced voluntary employee separation programs as part of its effort to reduce operating costs. The programs provide for cash payments based on previous years of service. The expense is recorded in the period the employees accept the separation offer. The programs' total pretax expenses are estimated to be approximately \$111 million, of which \$11 million was recorded in the fourth guarter of 2016, and approximately \$100 million will be recorded primarily in the first quarter of 2017. The payments for all programs will be substantially made in the first quarter of 2017. The 2017 expenses are estimated to be allocated approximately 30 percent cost of sales, 18 percent research and development and 52 percent selling, administrative and general. In addition, the expenses are estimated to be allocated 75 percent to agriculture and turf operations, 17 percent to the construction and forestry operations and 8 percent to the financial services operations. Savings from these programs are estimated to be approximately \$70 million in 2017.

In fiscal December 2016, the company sold approximately 38 percent of its interest in SiteOne resulting in gross proceeds of approximately \$114 million and a gain of approximately \$105 million pretax or \$66 million after-tax. The company retained approximately a 15 percent ownership interest in SiteOne after this sale. The gain will be reported in the agriculture and turf operating segment.

## 31. SUPPLEMENTAL CONSOLIDATING DATA

## **INCOME STATEMENT**

For the Years Ended October 31, 2016, 2015 and 2014

(In millions of dollars)

	EQUIPI	MENT OPERA	ATIONS*	FINANCIAL SERVICES				
	2016	2015	2014	2016	2015	2014		
Net Sales and Revenues								
Net sales	\$ 23,387.3	\$ 25,775.2	\$ 32,960.6					
Finance and interest income	61.1	77.0	76.5	\$ 2,690.1	\$ 2,557.0	\$ 2,475.0		
Other income	653.7	602.7	622.6	229.0	258.9	330.2		
Total	24,102.1	26,454.9	33,659.7	2,919.1	2,815.9	2,805.2		
Costs and Expenses								
Cost of sales	18,250.8	20,145.2	24,777.8					
Research and development expenses	1,389.1	1,425.1	1,452.0					
Selling, administrative and general expenses	2,262.5	2,393.8	2,765.1	508.5	487.3	529.2		
Interest expense	250.5	272.8	289.4	536.5	455.0	430.9		
Interest compensation to Financial Services	216.6	204.8	212.1					
Other operating expenses	215.7	195.0	285.4	1,167.0	911.7	925.6		
Total	22,585.2	24,636.7	29,781.8	2,212.0	1,854.0	1,885.7		
Income of Consolidated Group before Income Taxes	1,516.9	1,818.2	3,877.9	707.1	961.9	919.5		
Provision for income taxes	459.0	509.9	1,329.6	241.1	330.2	296.9		
Income of Consolidated Group	1,057.9	1,308.3	2,548.3	466.0	631.7	622.6		
Equity in Income (Loss) of Unconsolidated Subsidiaries and Affiliat	es							
Financial Services	467.6	632.9	624.5	1.6	1.2	1.9		
Other	(4.0	(.3)	(9.5)					
Total	463.6	632.6	615.0	1.6	1.2	1.9		
Net Income	1,521.5	1,940.9	3,163.3	467.6	632.9	624.5		
Less: Net income (loss) attributable to noncontrolling interests	(2.4	.9	1.6					
Net Income Attributable to Deere & Company	\$ 1,523.9	\$ 1,940.0	\$ 3,161.7	\$ 467.6	\$ 632.9	\$ 624.5		

<sup>\*</sup> Deere & Company with Financial Services on the equity basis.

The supplemental consolidating data is presented for informational purposes. The "Equipment Operations" reflect the basis of consolidation described in Note 1 to the consolidated financial statements. The consolidated group data in the "Equipment Operations" income statement reflect the results of the agriculture and turf operations and construction and forestry operations. Transactions between the "Equipment Operations" and "Financial Services" have been eliminated to arrive at the consolidated financial statements.

## 31. SUPPLEMENTAL CONSOLIDATING DATA (continued)

## **BALANCE SHEET**

As of October 31, 2016 and 2015

(In millions of dollars except per share amounts)

·	EQUIPMENT OPERATIONS* 2016 2015		FINANCIAL 2016		SERVICES 2015		
ASSETS							
Cash and cash equivalents	\$	3,140.5	\$	2,900.0	\$ 1,195.	3	\$ 1,262.2
Marketable securities		34.2		47.7	419.	3	389.7
Receivables from unconsolidated subsidiaries and affiliates		3,150.1		2,428.7			
Trade accounts and notes receivable – net		654.2		485.2	3,370.	5	3,553.1
Financing receivables – net		.4		.9	23,701.	9	24,808.1
Financing receivables securitized – net					5,126.	5	4,834.6
Other receivables		855.4		849.5	164.	0	152.9
Equipment on operating leases – net					5,901.	5	4,970.4
Inventories		3,340.5		3,817.0			
Property and equipment – net		5,118.5		5,126.2	52.	1	55.3
Investments in unconsolidated subsidiaries and affiliates		4,697.0		4,817.6	11.	9	10.5
Goodwill		815.7		726.0			
Other intangible assets – net		104.1		63.6			
Retirement benefits		93.6		211.9	20.	5	25.0
Deferred income taxes		3,556.0		3,092.0	75.	5	67.9
Other assets		855.8		807.3	840.	1	779.1
Total Assets	\$	26,416.0	\$	25,373.6	\$ 40,879.	_	\$ 40,908.8
LIABILITIES AND STOCKHOLDERS' EQUITY	<u>*</u>	20,110.0	<u> </u>	20,010.0	Ψ 10,010.		<u> </u>
LIABILITIES							
Short-term borrowings	\$	249.0	\$	464.3	\$ 6.663.	2	\$ 7.962.3
Short-term securitization borrowings	Ψ	249.0	Ψ	404.5	5,002.		4,590.0
Payables to unconsolidated subsidiaries and affiliates		81.5		80.6	3,133.		2,395.4
Accounts payable and accrued expenses		6,661.2		6,801.2	1,595.		1,511.2
Deferred income taxes		87.3		86.8	745.		466.6
Long-term borrowings		4,586.2		4,460.6	19,173.		19,372.2
Retirement benefits and other liabilities		8,206.0		6,722.5	89.		86.4
Total liabilities		19.871.2	_	18,616.0	36,402.	_	36.384.1
		19,071.2		10,010.0	30,402.	9	30,364.1
Commitments and contingencies (Note 22)		440					
Redeemable noncontrolling interest (Note 4)		14.0					
STOCKHOLDERS' EQUITY							
Common stock, \$1 par value (authorized – 1,200,000,000 shares; issued – 536,431,204 shares in 2016 and 2015), at paid-in amount		3.911.8		3.825.6	2.079.	1	2.050.8
Common stock in treasury, 221,663,380 shares in 2016 and 219,743,893 shares in		-,-		.,.	_,		_,::3.0
2015, at cost		(15,677.1)		(15,497.6)			
Retained earnings		23,911.3		23,144.8	2,670.		2,764.8
Accumulated other comprehensive income (loss)		(5,626.0)		(4,729.4)	(273.		(290.9)
Total Deere & Company stockholders' equity		6,520.0		6,743.4	4,476.	2	4,524.7
Noncontrolling interests		10.8		14.2			
Total stockholders' equity		6,530.8		6,757.6	4,476.	2	4,524.7
Total Liabilities and Stockholders' Equity	\$	26,416.0	\$	25,373.6	\$ 40,879.		\$ 40,908.8
. The Land of the Control of the Con	Ψ	_0,110.0	Ψ	_0,010.0	<del>y</del> 10,010.		<del>+ 10,000.0</del>

<sup>\*</sup> Deere & Company with Financial Services on the equity basis.

The supplemental consolidating data is presented for informational purposes. The "Equipment Operations" reflect the basis of consolidation described in Note 1 to the consolidated financial statements. Transactions between the "Equipment Operations" and "Financial Services" have been eliminated to arrive at the consolidated financial statements.

## 31. SUPPLEMENTAL CONSOLIDATING DATA (continued)

## STATEMENT OF CASH FLOWS

For the Years Ended October 31, 2016, 2015 and 2014

(In millions of dollars)

· · · · · · · · · · · · · · · · · · ·	EQUIPMENT OPERATIONS*			FINA	CES	
	2016	2015	2014	2016	2015	2014
Cash Flows from Operating Activities						
Net income	\$ 1,521.5	\$ 1,940.9	\$ 3,163.3	\$ 467.6	\$ 632.9	\$ 624.5
Adjustments to reconcile net income to net cash provided by operating						
activities:						
Provision for credit losses	8.2	5.5	2.9	86.1	49.9	35.2
Provision for depreciation and amortization	803.4	791.8	795.7	846.7	688.5	574.9
Impairment charges	25.4	15.3	95.9	59.7	19.5	
Undistributed earnings of unconsolidated subsidiaries and						
affiliates	94.0	46.6	(463.4)	(1.5)	(1.0)	(1.7)
Provision (credit) for deferred income taxes	13.2	(139.8)	(236.4)	269.5	121.4	(43.7)
Changes in assets and liabilities:						
Trade receivables	(175.3)	113.4	231.5			(4.40.0)
Insurance receivables		//= A\			333.4	(149.9)
Inventories	578.4	(17.0)			(0.1= 1)	
Accounts payable and accrued expenses	(169.6)			40.6	(245.4)	263.3
Accrued income taxes payable/receivable	12.8	(133.0)		(11.2)	(4.6)	12.1
Retirement benefits	232.4	414.3	323.0	6.2	13.2	13.9
Other	(38.0)		70.0	97.1	(25.7)	(7.7)
Net cash provided by operating activities	2,906.4	3,055.3	4,532.2	1,860.8	1,582.1	1,320.9
Cash Flows from Investing Activities						
Collections of receivables (excluding trade and wholesale)				15,831.4	16,266.1	16,772.0
Proceeds from maturities and sales of marketable securities	81.9	700.1	1,000.1	87.5	160.6	22.4
Proceeds from sales of equipment on operating leases				1,256.2	1,049.4	1,091.5
Proceeds from sales of businesses and unconsolidated						
affiliates, net of cash sold	81.1		345.8		149.2	
Cost of receivables acquired (excluding trade and wholesale)				(15,168.2)	(16,327.8)	(19,015.3)
Purchases of marketable securities	(59.4)			(111.8)	(94.9)	(110.5)
Purchases of property and equipment	(641.8)	(688.1)	(1,045.2)	(2.6)	(5.9)	(3.1)
Cost of equipment on operating leases acquired				(3,235.7)	(3,043.6)	(2,684.2)
Increase in investment in Financial Services	(28.2)	,	(66.8)			
Acquisitions of businesses, net of cash acquired	(198.5)					
Decrease (increase) in trade and wholesale receivables	/== a\		(00.0)	492.5	657.0	(782.0)
Other	(55.2)		(98.6)	24.6	(45.1)	(47.1)
Net cash used for investing activities	(820.1)	(68.6)	(368.8)	(826.1)	(1,235.0)	(4,756.3)
Cash Flows from Financing Activities						
Increase (decrease) in total short-term borrowings	(207.2)		(65.8)	(1,006.4)	289.7	155.0
Change in intercompany receivables/payables	(756.0)		(367.5)	756.0	(928.6)	367.5
Proceeds from long-term borrowings	173.4	6.2	60.7	4,897.3	5,704.8	8,171.3
Payments of long-term borrowings	(72.8)			(5,194.8)	(4,649.0)	(4,390.0)
Proceeds from issuance of common stock	36.0	172.1	149.5			
Repurchases of common stock	(205.4)	(2,770.7)	(2,731.1)			
Capital investment from Equipment Operations				28.2	27.4	66.8
Dividends paid	(761.3)			(562.1)	(679.6)	(150.0)
Excess tax benefits from share-based compensation	5.4	18.5	30.8			
Other	(36.7)			(28.0)	(26.7)	(35.9)
Net cash provided by (used for) financing activities	(1,824.6)			(1,109.8)	(262.0)	4,184.7
Effect of Exchange Rate Changes on Cash and Cash Equivalents	(21.2)	(146.6)		8.2	(40.7)	(12.3)
Net Increase (Decrease) in Cash and Cash Equivalents	240.5	330.8	(454.1)	(66.9)	44.4	737.0
Cash and Cash Equivalents at Beginning of Year	2,900.0	2,569.2	3,023.3	1,262.2	1,217.8	480.8
Cash and Cash Equivalents at End of Year	\$ 3,140.5	\$ 2,900.0	\$ 2,569.2	\$ 1,195.3	\$ 1,262.2	\$ 1,217.8
	<del>,</del>					

<sup>\*</sup> Deere & Company with Financial Services on the equity basis.

The supplemental consolidating data is presented for informational purposes. The "Equipment Operations" reflect the basis of consolidation described in Note 1 to the consolidated financial statements. Transactions between the "Equipment Operations" and "Financial Services" have been eliminated to arrive at the consolidated financial statements.

	2016	2015	2014	2013	2012	2011	2010	2009	2008	2007
Net sales and revenues				\$37,795				\$23,112		\$24,082
Net sales	23,387	25,775	32,961	34,998	33,501	29,466	23,573	20,756	25,803	21,489
Finance and interest income	2,511	2,381	2,282	2,115	1,981	1,923	1,825	1,842	2,068	2,055
Research and development expenses	1,389	1,425	1,452	1,477	1,434	1,226	1,052	977	943	817
Selling, administrative and general expenses	2,764	2,873	3,284	3,606	3,417	3,169	2,969	2,781	2,960	2,621
Interest expense	764	680	664	741	783	759	811	1,042	1,137	1,151
Net income*	1,524	1,940	3,162	3,537	3,065	2,800	1,865	873	2,053	1,822
Return on net sales	6.5%	7.5%	9.6%	10.1%	9.1%	9.5%	7.9%	4.2%	8.0%	8.5%
Return on beginning Deere & Company stockholders'										
equity	22.6%	21.4%	30.8%	51.7%	45.1%	44.5%	38.7%	13.4%	28.7%	24.3%
Comprehensive income (loss)*	627	994	2,072	5,416	2,171	2,502	2,079	(1,333)	1,303	2,201
Nietinaana nanahana hasia*	4.83	E 04	0.74	0.40	7 70	0.74	4.40	2.07	4.70	4.05
Net income per share – basic*		5.81	8.71	9.18	7.72	6.71	4.40		4.76	4.05
- diluted*	4.81	5.77	8.63	9.09	7.63	6.63	4.35	2.06	4.70	4.00
Dividends declared per share	2.40	2.40	2.22	1.99	1.79	1.52	1.16	1.12	1.06	.91
Dividends paid per share	2.40	2.40	2.13	1.94	1.74	1.41	1.14	1.12	1.03	.85 <sup>1</sup> /2
Average number of common	0.45.0	000.0	000.0	005.0	007.4	447.4	4040	400.0	404.4	440.0
shares outstanding (in millions) – basic	315.2	333.6	363.0	385.3	397.1	417.4	424.0	422.8	431.1	449.3
_ diluted	316.6	336.0	366.1	389.2	401.5	422.4	428.6	424.4	436.3	455.0
Total assets								\$41,133		
Trade accounts and notes receivable – net	3,011	3,051	3,278	3,758	3,799	3,295	3,464	2,617	3,235	3,055
Financing receivables – net	23,702	24,809	27,422	25,633	22,159	19,924	17,682	15,255	16,017	15,631
Financing receivables securitized – net	5,127	4,835	4,602	4,153	3,618	2,905	2,238	3,108	1,645	2,289
Equipment on operating leases – net	5,902	4,970	4,016	3,152	2,528	2,150	1,936	1,733	1,639	1,705
Inventories	3,341	3,817	4,210	4,935	5,170	4,371	3,063	2,397	3,042	2,337
Property and equipment – net	5,171	5,181	5,578	5,467	5,012	4,352	3,791	4,532	4,128	3,534
Short-term borrowings:				4 000		=00			0.10	
Equipment operations	249	465	434	1,080	425	528	85	490	218	130
Financial services	6,663	7,962	7,585	7,709	5,968	6,324	5,241	3,537	6,621	7,495
Total	6,912	8,427	8,019	8,789	6,393	6,852	5,326	4,027	6,839	7,625
Short-term securitization borrowings:										
Financial services	5,003	4,590	4,559	4,109	3,575	2,777	2,209	3,132	1,682	2,344
Long-term borrowings:										
Equipment operations	4,586	4,461	4,643	4,871	5,445	3,167	3,329	3,073	1,992	1,973
Financial services	_19,174	19,372	_19,738	_16,707	17,008	_13,793	_13,486	14,319	_11,907	9,825
Total	23,760	23,833	24,381	21,578	22,453	16,960	16,815	17,392	13,899	11,798
Total Deere & Company stockholders' equity	6,520	6,743	9,063	10,266	6,842	6,800	6,290	4,819	6,533	7,156
Dook value per chare*	¢ 20.74	£ 24.00	Ф 06 00	¢ 07.40	¢ 17.04	¢ 16.75	¢ 14.00	e 11.20	C 15 17	Ф 16 OO
Book value per share*								\$ 11.39		
Capital expenditures	\$ 668					\$ 1,050			\$ 1,117	
Number of employees (at year end)	56,767	57,180	59,623	o7,044	06,859	01,278	55,650	51,262	56,653	52,022

Attributable to Deere & Company.

#### REPORT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

#### Deere & Company:

We have audited the accompanying consolidated balance sheets of Deere & Company and subsidiaries (the "Company") as of October 31, 2016 and 2015, and the related statements of consolidated income, consolidated comprehensive income, changes in consolidated stockholders' equity, and consolidated cash flows for each of the three years in the period ended October 31, 2016. Our audits also included the financial statement schedule listed in the Index under Part IV, Item 15(2). We also have audited the Company's internal control over financial reporting as of October 31, 2016, based on criteria established in *Internal Control — Integrated Framework* (2013) issued by the Committee of Sponsoring Organizations of the Treadway Commission. The Company's management is responsible for these financial statements and financial statement schedule, for maintaining effective internal control over financial reporting, and for its assessment of the effectiveness of internal control over financial reporting, included in the accompanying Management's Report on Internal Control Over Financial Reporting. Our responsibility is to express an opinion on these financial statements and financial statement schedule and an opinion on the Company's internal control over financial reporting based on our audits.

We conducted our audits in accordance with the standards of the Public Company Accounting Oversight Board (United States). Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatement and whether effective internal control over financial reporting was maintained in all material respects. Our audits of the financial statements included examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements, assessing the accounting principles used and significant estimates made by management, and evaluating the overall financial statement presentation. Our audit of internal control over financial reporting included obtaining an understanding of internal control over financial reporting, assessing the risk that a material weakness exists, and testing and evaluating the design and operating effectiveness of internal control based on the assessed risk. Our audits also included performing such other procedures as we considered necessary in the circumstances. We believe that our audits provide a reasonable basis for our opinions.

A company's internal control over financial reporting is a process designed by, or under the supervision of, the company's principal executive and principal financial officers, or persons performing similar functions, and effected by the company's board of directors, management, and other personnel to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles. A company's internal control over financial reporting includes those policies and procedures that (1) pertain to the maintenance of records that, in reasonable detail, accurately and fairly reflect the transactions and dispositions of the assets of the company; (2) provide reasonable assurance that transactions are recorded as necessary to permit preparation of financial statements in accordance with generally accepted accounting principles, and that receipts and expenditures of the company are being made only in accordance with authorizations of management and directors of the company; and (3) provide reasonable assurance regarding prevention or timely detection of unauthorized acquisition, use, or disposition of the company's assets that could have a material effect on the financial statements.

Because of the inherent limitations of internal control over financial reporting, including the possibility of collusion or improper management override of controls, material misstatements due to error or fraud may not be prevented or detected on a timely basis. Also, projections of any evaluation of the effectiveness of the internal control over financial reporting to future periods are subject to the risk that the controls may become inadequate because of changes in conditions, or that the degree of compliance with the policies or procedures may deteriorate.

In our opinion, the consolidated financial statements referred to above present fairly, in all material respects, the financial position of the Company as of October 31, 2016 and 2015, and the results of their operations and their cash flows for each of the three years in the period ended October 31, 2016, in conformity with accounting principles generally accepted in the United States of America. Also, in our opinion, such financial statement schedule, when considered in relation to the basic consolidated financial statements taken as a whole, presents fairly, in all material respects, the information set forth therein. Also, in our opinion, the Company maintained, in all material respects, effective internal control over financial reporting as of October 31, 2016, based on the criteria established in *Internal Control — Integrated Framework* (2013) issued by the Committee of Sponsoring Organizations of the Treadway Commission.

/s/ DELOITTE & TOUCHE LLP Chicago, Illinois

December 19, 2016

## **SIGNATURES**

Pursuant to the requirements of Section 13 or 15(d) of the Securities Exchange Act of 1934, the registrant has duly caused this report to be signed on its behalf by the undersigned, thereunto duly authorized.

## **DEERE & COMPANY**

By: /s/ Samuel R. Allen

Samuel R. Allen

Chairman and Chief Executive Officer

Date: December 19, 2016

Pursuant to the requirements of the Securities Exchange Act of 1934, this report has been signed below by the following persons on behalf of the registrant and in the capacities and on the date indicated.

Each person signing below also hereby appoints Samuel R. Allen, Rajesh Kalathur and Todd E. Davies, and each of them singly, his or her lawful attorney-in-fact with full power to execute and file any and all amendments to this report together with exhibits thereto and generally to do all such things as such attorney-in-fact may deem appropriate to enable Deere & Company to comply with the provisions of the Securities Exchange Act of 1934 and all requirements of the Securities and Exchange Commission.

Signature	Title	Date	
		)	
/s/ Samuel R. Allen	Chairman, Chief Executive	, )	
Samuel R. Allen	Officer and Director	)	
		)	
/s/ Crandall C. Bowles	Director	)	
Crandall C. Bowles		)	
		, )	
	D: 4	)	
/s/ Vance D. Coffman	Director	)	
Vance D. Coffman		)	
		)	
/s/ Dipak C. Jain	Director	)	
Dipak C. Jain		)	
		)	
/s/ Michael O. Johanns	Director	)	
Michael O. Johanns		, )	
		)	
/s/ Clayton M. Jones	Director	)	
Clayton M. Jones		)	
Glayton W. Gones		)	
		)	
/s/ Brian M. Krzanich	Director	)	
Brian M. Krzanich		)	
		)	
/s/ Rajesh Kalathur	Senior Vice President and	)	
Rajesh Kalathur	Chief Financial Officer	) December 19, 2016	
		)	
		)	
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/s/ Gregory R. Page Gregory R. Page	Director	) ) )
/s/ Sherry M. Smith Sherry M. Smith	Director	) ) )
/s/ Dmitri L. Stockton Dmitri L. Stockton	Director	) ) )
/s/ Sheila G. Talton Sheila G. Talton	Director	) ) ) )
	72	)

# DEERE & COMPANY AND CONSOLIDATED SUBSIDIARIES VALUATION AND QUALIFYING ACCOUNTS For the Years Ended October 31, 2016, 2015 and 2014 (in thousands of dollars)

	Column D		Deductions	Description	Trade receivable write-offs	Trade receivable write-offs	Financing receivable write-offs		Trade receivable write-offs Other - primanly translation	Trade receivable write-offs	Outer - printainy translation Financing received write-offs	ינופו - טוווומווון נימונאמנטוו	Trade receivable write-offs Other - nrimaniv translation	Trade receivable write-offs	Outer - printainy translation Financing received by the offs Other principles	iurei - piiitainy varistavori	
			nts	Amount	\$ 294 T	T 18		\$ 42,791	\$ 116 T	Z30 T	25,987 F	\$ 26,333	F 26	92 T	25,968 F	\$ 26,152	
(in thousands of dollars)	Column C	Additions	Charges to other accounts	Description	Bad debt recoveries Other - primanily translation	Bad debt recoveries	Outer - primarily translation Bad debt recoveries	Omer - primarily translation	Bad debt recoveries	Bad debt recoveries	Bad debt recoveries		Bad debt recoveries	Bad debt recoveries	Bad debt recoveries		73
			Charges to costs &	exbense	8,132	2,893	84,230	95,255	5,270	1,172	46,481	52,923	3,054	4,009	31,179	38,242	
	Column B		Balance at Beginning	of Period	\$ 34,891 \$	5,932	157,621	\$ 198,444	\$ 50.248 \$	5,298	174,632	\$ 230,178	\$ 62,845 \$	4,300	173,000	\$ 240,145	
	Column A				YEAR ENDED OCTOBER 30, 2016 Allowance for credit losses: Equipment Operations Trade receivable allowances	<u>Financial Services</u> Trade receivable allowances	Financing receivable allowances	Consolidated receivable allowances	YEAR ENDED OCTOBER 30, 2015 Allowance for credit losses: <u>Equipment Operations</u> Trade receivable allowances	Financial Services Trade receivable allowances	Financing receivable allowances	Consolidated receivable allowances	YEAR ENDED OCTOBER 30, 2014 Allowance for credit losses: Equipment Operations Trade receivable allowances	<u>Financial Services</u> Trade receivable allowances	Financing receivable allowances	Consolidated receivable allowances	

- 3.1 Certificate of incorporation, as amended (Exhibit 3.1 to Form 8-K of registrant dated February 26, 2010, Securities and Exchange Commission File Number 1-4121\*)
- 3.2 Certificate of Designation Preferences and Rights of Series A Participating Preferred Stock (Exhibit 3.2 to Form 10-K of registrant for the year ended October 31, 1998, Securities and Exchange Commission File Number 1-4121\*)
- Bylaws, as amended (Exhibit 3.1 to Form 8-K of registrant dated September 1, 2016, Securities and Exchange Commission File Number 1-4121\*)
- 4.1 Form of common stock certificate (Exhibit 4.6 to Form 10-K of registrant for the year ended October 31, 1998, Securities and Exchange Commission File Number 1-4121\*)
- 4.2 Indenture dated as of September 25, 2008 between the registrant and The Bank of New York Mellon, as Trustee (Exhibit 4.1 to the registration statement on Form S-3ASR no. 333-153704, filed September 26, 2008, Securities and Exchange Commission file number 1-4121\*)
- 4.3 Terms and Conditions of the Notes, published on February 3, 2012, applicable to the U.S. \$3,000,000,000 Euro Medium Term Note Programme of registrant, John Deere Capital Corporation, John Deere Bank S.A., John Deere Cash Management S.A. and John Deere Financial Limited (Exhibit 4.3 to Form 10-K of registrant for the year ended October 31, 2012, Securities and Exchange Commission File Number 1-4121\*)

Certain instruments relating to long-term debt constituting less than 10% of the registrant's total assets, are not filed as exhibits herewith pursuant to Item 601(b)(4)(iii)(A) of Regulation S-K. The registrant will file copies of such instruments upon request of the Commission.

- 10.1 Agreement as amended November 1, 1994 between registrant and John Deere Capital Corporation concerning agricultural retail notes (Exhibit 10.1 to Form 10-K of registrant for the year ended October 31, 1998, Securities and Exchange Commission File Number 1-4121\*)
- Agreement as amended November 1, 1994 between registrant and John Deere Capital Corporation relating to lawn and grounds care retail notes (Exhibit 10.2 to Form 10-K of registrant for the year ended October 31, 1998, Securities and Exchange Commission File Number 1-4121\*)
- Agreement as amended November 1, 1994 between John Deere Construction Equipment Company, a wholly-owned subsidiary of registrant and John Deere Capital Corporation concerning construction retail notes (Exhibit 10.3 to Form 10-K of registrant for the year ended October 31, 1998, Securities and Exchange Commission File Number 1-4121\*)
- Agreement dated July 14, 1997 between the John Deere Construction Equipment Company and John Deere Capital Corporation concerning construction retail notes (Exhibit 10.4 to Form 10-K of registrant for the year ended October 31, 2003, Securities and Exchange Commission File Number 1-4121\*)
- Agreement dated November 1, 2003 between registrant and John Deere Capital Corporation relating to fixed charges ratio, ownership and minimum net worth of John Deere Capital Corporation (Exhibit 10.5 to Form 10-K of registrant for the year ended October 31, 2003, Securities and Exchange Commission File Number 1-4121\*)
- 10.6 Deere & Company Voluntary Deferred Compensation Plan as amended January 2014 (Exhibit 10.6 to Form 10-K of registrant for the year ended October 31, 2014, Securities and Exchange Commission File Number 1-4121\*)
- 10.7 John Deere Short-Term Incentive Bonus Plan (Appendix E to Proxy Statement of registrant filed December 19, 2014 Securities and Exchange Commission File Number 1-4121\*)
- John Deere Mid-Term Incentive Plan (Appendix A to Proxy Statement of registrant filed January 14, 2013, Securities and Exchange Commission File Number 1-4121\*)

10. 9	John Deere Omnibus Equity and Incentive Plan (Appendix D to Proxy Statement of registrant filed December 19, 2014 Securities and Exchange Commission File Number 1-4121*)
10.10	Form of Terms and Conditions for John Deere Nonqualified Stock Option Grant (Exhibit 10.10 to Form 10-K of registrant for the year ended October 31, 2010, Securities and Exchange Commission File Number 1-4121*)
10.11	Form of John Deere Restricted and Performance Stock Unit Grant for Employees (Exhibit 10.11 to Form 10-K of the registrant for the year ended October 31, 2012, Securities and Exchange Commission File Number 1-4121*)
10.12	Form of John Deere Restricted Stock Unit Grant for Directors (Exhibit 10.13 to Form 10-K of the registrant for the year ended October 31, 2008, Securities and Exchange Commission File Number 1-4121*)
10.13	Form of Nonemployee Director Restricted Stock Grant (Exhibit 10.13 to Form 10-K of registrant for the year ended October 31, 2004, Securities and Exchange Commission File Number 1-4121*)
10.14	John Deere Defined Contribution Restoration Plan as amended March 2013 (Exhibit 10.14 to Form 10-K of registrant for the year ended October 31, 2014, Securities and Exchange Commission File Number 1-4121*)
10.15	John Deere Supplemental Pension Benefit Plan, as amended October 2014 (Exhibit 10.15 to Form 10-K of registrant for the year ended October 31, 2014, Securities and Exchange Commission File Number 1-4121*)
10.16	John Deere Senior Supplementary Pension Benefit Plan as amended October 2014 (Exhibit 10.16 to Form 10-K of registrant for the year ended October 31, 2014, Securities and Exchange Commission File Number 1-4121*)
10.17	John Deere ERISA Supplementary Pension Benefit Plan as amended December 2011 (Exhibit 10.17 to Form 10-K of registrant for the year ended October 31, 2014, Securities and Exchange Commission File Number 1-4121*)
10.18	Nonemployee Director Stock Ownership Plan (Appendix A to Proxy Statement of registrant filed on January 13, 2012, Securities and Exchange Commission File Number 1-4121*)
10.19	Deere & Company Nonemployee Director Deferred Compensation Plan, as amended February 25, 2009 (Exhibit 10.20 to Form 10-K of registrant for the year ended October 31, 2009, Securities and Exchange Commission File Number 1-4121*)
10.20	Change in Control Severance Program, effective August 26, 2009 (Exhibit 10 to Form 8-K of registrant dated August 26, 2009, Securities and Exchange Commission File Number 1-4121*)
10.21	Executive Incentive Award Recoupment Policy (Exhibit 10.9 to Form 10-Q of registrant for the quarter ended January 31, 2008, Securities and Exchange Commission File Number 1-4121*)
10.22	Asset Purchase Agreement dated October 29, 2001 between registrant and Deere Capital, Inc. concerning the sale of trade receivables (Exhibit 10.19 to Form 10-K of registrant for the year ended October 31, 2001, Securities and Exchange Commission File Number 1-4121*)
10.23	Asset Purchase Agreement dated October 29, 2001 between John Deere Construction & Forestry Company and Deere Capital, Inc. concerning the sale of trade receivables (Exhibit 10.20 to Form 10-K of registrant for the year ended October 31, 2001, Securities and Exchange Commission File Number 1-4121*)
10.24	Factoring Agreement dated September 20, 2002 between John Deere Bank S.A. (as successor in interest to John Deere Finance S.A.) and John Deere Vertrieb, a branch of Deere & Company, concerning the sale of trade receivables (Exhibit 10.21 to Form 10-K of registrant for the year ended October 31, 2002, Securities and Exchange Commission File Number 1-4121*)
10.25	Receivables Purchase Agreement dated August 23, 2002 between John Deere Bank S.A. (as successor in interest to John Deere Finance S.A.) and John Deere Limited (Scotland) concerning the sale of trade receivables (Exhibit 10.22 to Form 10-K of registrant for the year ended October 31, 2002, Securities and Exchange Commission File Number 1-4121*)
10.26	Joint Venture Agreement dated May 16, 1988 between registrant and Hitachi Construction Machinery Co., Ltd ((Exhibit 10.26 to Form 10-K of registrant for the year ended October 31, 2005, Securities and Exchange Commission File Number 1-4121*)

10.27	Marketing Profit Sharing Agreement dated January 1, 2002 between John Deere Construction and Forestry Equipment Company (also known as John Deere Construction & Forestry Company) and Hitachi Construction Machinery Holding U.S.A. Corporation (Exhibit 10.27 to Form 10-K of registrant for the year ended October 31, 2005, Securities and Exchange Commission File Number 1-4121*)
10.28	Integrated Marketing Agreement dated October 16, 2001 between registrant and Hitachi Construction Machinery Co. Ltd. (Exhibit 10.28 to Form 10-K of registrant for the year ended October 31, 2005, Securities and Exchange Commission File Number 1-4121*)
10.29	2020 Credit Agreement among the registrant, John Deere Capital Corporation, John Deere Bank S.A., various financial institutions, JPMorgan Chase Bank, N.A., as administration agent, Citibank, N.A. and Deutsche Bank Securities, Inc., as documentation agents, and Bank of America, N.A., as syndication agent, dated February 22, 2016 (Exhibit 10.1 to form 10-Q of registrant for the quarter ended January 31, 2016, Securities and Exchange Commission File Number 1-4121*)
10.30	2021 Credit Agreement among registrant, John Deere Capital Corporation, John Deere Bank S.A., various financial institutions, JPMorgan Chase Bank, N.A., as administration agent, Citibank, N.A. and Deutsche Bank Securities Inc., as documentation agents, and Bank of America, N.A., as syndication agent, et al., dated February 22, 2016 (Exhibit 10.2 to form 10-Q of registrant for the quarter ended January 31, 2016, Securities and Exchange Commission File Number 1-4121*)
12.	Computation of ratio of earnings to fixed charges
21.	Subsidiaries
23.	Consent of Deloitte & Touche LLP
24.	Power of Attorney (included on signature page)
31.1	Rule 13a-14(a)/15d-14(a) Certification
31.2	Rule 13a-14(a)/15d-14(a) Certification
32	Section 1350 Certifications

<sup>\*</sup> Incorporated by reference. Copies of these exhibits are available from the Company upon request.

Interactive Data File

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### DEERE & COMPANY AND CONSOLIDATED SUBSIDIARIES

## COMPUTATION OF RATIO OF EARNINGS TO FIXED CHARGES (In millions of dollars)

	Year Ended October 31									
Comingo		2016		2015	_	2014		2013		2012
Earnings:										
Income of consolidated group before income taxes	\$	2,224.0	\$	2,780.1	\$	4,797.4	\$	5,483.4	\$	4,734.4
Dividends received from unconsolidated affiliates		8.3		1.3		.6		9.9		.2
Fixed charges excluding unamortized capitalized interest		771.9	_	687.8	_	669.3	_	749.0		790.5
Total earnings	\$	3,004.2	\$	3,469.2	\$	5,467.3	\$	6,242.3	\$	5,525.1
Fixed charges:										
Interest expense of consolidated group including capitalized interest	\$	769.0	\$	687.4	\$	670.2	\$	754.8	\$	790.3
Portion of rental charges deemed to be interest		8.2		7.8	_	5.3		7.7		7.7
Total fixed charges	\$	777.2	\$	695.2	\$	675.5	\$	762.5	\$	798.0
Ratio of earnings to fixed charges	_	3.87	_	4.99	_	8.09	_	8.19	_	6.92

The computation of the ratio of earnings to fixed charges is based on applicable amounts of the Company and its consolidated subsidiaries plus dividends received from unconsolidated affiliates. "Earnings" consist of income before income taxes, the cumulative effect of changes in accounting, discontinued operations and fixed charges excluding unamortized capitalized interest. "Fixed charges" consist of interest on indebtedness, amortization of debt discount and expense, interest related to uncertain tax positions, an estimated amount of rental expense that is deemed to be representative of the interest factor, and capitalized interest.

The Company has not issued preferred stock. Therefore, the ratios of earnings to combined fixed charges and preferred stock dividends are the same as the ratios presented above.

### DEERE & COMPANY AND CONSOLIDATED SUBSIDIARIES

### SUBSIDIARIES OF THE REGISTRANT

### As of October 31, 2016

Subsidiary companies of Deere & Company are listed below. Except where otherwise indicated, 100 percent of the voting securities of the companies named is owned directly or indirectly by Deere & Company.

	Organized
	under the
Name of subsidiary	laws of
Subsidiaries included in consolidated financial statements *	
Banco John Deere S.A.	Brazil
Chamberlain Holdings Limited	Australia
Deere Capital, Inc.	Nevada
Deere Credit, Inc.	Delaware
Deere Credit Services, Inc.	Delaware
Deere Receivables LLC	Nevada
Farm Plan Corporation	Delaware
FPC Receivables, Inc.	Nevada
Industrias John Deere Argentina S.A.	Argentina
JD Netherlands Holdings C.V.	Netherlands
John Deere (China) Investment Co., Ltd.	China
John Deere (Jiamusi) Agricultural Machinery Co., Ltd.	China
John Deere (Ningbo) Agricultural Machinery Co., Ltd.	China
John Deere (Tianjin) International Trading Co., Ltd.	China
John Deere Advanced Technologies, LLC	Delaware
John Deere Agricultural Holdings, Inc.	Delaware
John Deere Asia (Singapore) Private Limited	Singapore
John Deere Bank S.A.	Luxembourg
John Deere Brasil Ltda.	Brazil
John Deere Canada ULC	Canada
John Deere Capital Corporation	Delaware
John Deere Cash Management S.A.	Luxembourg
John Deere Construction & Forestry Company	Delaware
John Deere - Distribuidora de Títulos e Valores Mobiliários Ltda.	Brazil
John Deere Financial, f.s.b.	Federal
John Deere Financial Inc.	Canada
John Deere Financial Limited	Australia
John Deere Financial Mexico, S.A. de C.V. SOFOM, ENR	Mexico
John Deere Financial Services, Inc.	Delaware
John Deere Forestry Group LLC	Illinois
John Deere Funding Corporation	Nevada
John Deere GmbH & Co. KG	Germany
John Deere Iberica S.A.	Spain
John Deere India Private Limited	India
John Deere International GmbH	Switzerland
John Deere-Lanz Verwaltungs-Aktiengesellschaft	Germany
John Deere Leasing Company	Delaware

John Deere Limited John Deere Limited John Deere Luxembourg Investment S.à r.l.
John Deere Management Deutschland GmbH & Co. KG John Deere Polska Sp. z o.o. John Deere Receivables, Inc. John Deere, S.A. de C.V. John Deere S.A.S.
John Deere Shared Services, Inc.

John Deere Thibodaux, Inc. Motores John Deere S.A. de C.V. Nortrax, Inc.

The Vapormatic Company Limited
Waratah Forestry Equipment Canada Ltd.

Australia United Kingdom Luxembourg Germany Poland Nevada Mexico France Delaware Louisiana Mexico Delaware United Kingdom Canada

Ninety-two consolidated subsidiaries and forty-five unconsolidated affiliates, whose names are omitted, considered in the aggregate as a single subsidiary, would not constitute a significant subsidiary.

### CONSENT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

We consent to the incorporation by reference in Registration Statement Nos. 333-165069, 333-62669, 333-103757, 333-132013, 333-140980, 333-140981 and 333-202299 on Form S-8 and in Registration Statement No. 333-201096 on Form S-3 of our report dated December 19, 2016, relating to the consolidated financial statements and financial statement schedule of Deere & Company and subsidiaries ("Deere & Company"), and the effectiveness of Deere & Company's internal control over financial reporting, appearing in this Annual Report on Form 10-K of Deere & Company for the year ended October 31, 2016.

/s/ DELOITTE & TOUCHE LLP Chicago, Illinois

December 19, 2016

### **CERTIFICATIONS**

### I, Samuel R. Allen, certify that:

- 1. I have reviewed this annual report on Form 10-K of Deere & Company;
- 2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;
- 3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;
- 4. The registrant's other certifying officer(s) and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e)) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f)) and 15d-15(f)) for the registrant and have:
  - (a) Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;
  - (b) Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;
  - (c) Evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and
  - (d) Disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and
- 5. The registrant's other certifying officer(s) and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant's board of directors (or persons performing the equivalent functions):
  - (a) All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and
  - (b) Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

Date: December 19, 2016 By: /s/ Samuel R. Allen

Samuel R. Allen

Chairman and Chief Executive Officer

### **CERTIFICATIONS**

### I, Rajesh Kalathur, certify that:

- 1. I have reviewed this annual report on Form 10-K of Deere & Company;
- 2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report:
- 3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;
- 4. The registrant's other certifying officer(s) and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e)) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f)) and 15d-15(f)) for the registrant and have:
  - (a) Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;
  - (b) Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;
  - (c) Evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and
  - (d) Disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and
- 5. The registrant's other certifying officer(s) and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant's board of directors (or persons performing the equivalent functions):
  - (a) All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and
  - (b) Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

Date: December 19, 2016 By: /s/ Rajesh Kalathur

Rajesh Kalathur

Senior Vice President and Chief Financial Officer

# STATEMENT PURSUANT TO 18 U.S.C. SECTION 1350 AS REQUIRED BY SECTION 906 OF THE SARBANES-OXLEY ACT OF 2002

In connection with the Annual Report of Deere & Company (the "Company") on Form 10-K for the period ending October 31, 2016, as filed with the Securities and Exchange Commission on the date hereof (the "Report"), the undersigned hereby certify that to the best of our knowledge:

1. The Report fully complies with the requirements of Section 13(a) or 15(d) of the Securities Exchange Act of 1934; and

<ol><li>The information contains</li></ol>	ned in the Report fairly presents	, in all material respects,	the financial condition and re	esults of operations of the Company.
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December 19, 2016	/s/ Samuel R. Allen Samuel R. Allen	Chairman and Chief Executive Officer
December 19, 2016	/s/ Rajesh Kalathur Rajesh Kalathur	Senior Vice President and Chief Financial Officer
A signed original of this wr	itten statement required by Section 906 has beer	provided to Deere & Company and will be retained by Deere & Company

A signed original of this written statement required by Section 906 has been provided to Deere & Company and will be retained by Deere & Company and furnished to the Securities and Exchange Commission or its staff upon request.